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TRAINING COURSES FOR MODERN LANGUAGE TEACHERS

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Mais ne proposant cet écrit que comme une histoire, ou, si vous l'aimez mieux, comme une fable, en laquelle, parmi quelques exemples qu'on peut imiter, on en trouvera peut-être aussi plusieurs autres qu'on aura raison de ne pas suivre, j'espère qu'il sera utile à quelques-uns sans être nuisible à personne, et que tous me sauront gré de ma franchise.—Descartes.

A teacher means some one who teaches. Knowing a subject is not teaching; lecturing about it is a poor substitute for teaching; asking questions about it is but a part of teaching.—Snow.

If we aim at careful instruction in our subjects, we must make it practically impossible for any teacher in the country to believe that a smattering of the language aided and abetted by a total ignorance of the rudiments of teaching will enable him to hold on in high schools or even in some colleges. We must likewise so arrange our professional work as to preclude the query on the part of Spanish or French clerks or salesmen as to why they should not be occupying high university positions in view of their intimate knowledge of their own language. Questions of this sort have not been unknown.—Warshaw.

1. Recent progress in the professional training of teachers — The practical needs of the young teacher: how far are they met? — Reasons why colleges and graduate schools should consider the teacher of elementary classes — A radical change not contemplated: to the present valuable courses should be added pronunciation, syntax, aims and methods, and speaking ability — II. The need to recognize teaching ability through the training course and the appointment of good teachers to teaching posts — The researcher and the "mere teacher"; results of the confusion of gifts, — contempt for scholarship, clumsy teachers, unjustifiable ambition for graduate courses — Value of research and advanced scholarship — III. What can the Teacher Training Course offer?— It is not omnipotent — General observations on professional training — Probable benefits of training to the modern language teacher,—the thoughtful attitude; the professional spirit; ambition for better preparation; concrete ideas concerning purpose, organization, method, and devices — Some essentials commonly overlooked by the inexperienced — Simple lessons gained by experience can be passed along — Practice teaching — The theoretical

element — Origin of Training Course in Clark University; its component parts; pronunciation and syntax believed to belong to separate courses — Educational topics discussed: — "The Training Course," "The Preparation of the Teacher for his Work," "The Teacher and his Books," "Aim and Method," (with emphasis on pronunciation) "Examinations and the Marking System," "The Practical Administration of a Course," "Text-Books," "Lesson Plans," "Literature" — Collateral reading and class discussion — Method *vs.* content — The mechanical drill-master and the spiritual issues — The director of the Teacher Training Course — Its modest aims.—*Bibliographical Note.*

I

In the good old philosophy of our childhood any one who could not make a success of a serious job could teach; as for French, any fool could teach that. Occasionally it may have been conceded that the intending teacher of the modern languages would not be injured by a small amount of special training—say an extra course or two in the senior year, or even a short trip abroad—but this small concession to special training seldom went far enough to stigmatize a man as an expert. As for advanced scholarship, it was an unheard-of luxury, and training in the art of teaching was not even known to exist.

In the realm of expert scholarship, at least, we have outgrown those barbaric days. Our competent graduate schools are at present training thorough scholars, and even undergraduates planning to teach in the high schools immediately after graduation seek now to secure in college something like a good elementary knowledge of the subject,—though it be French! Our standards of professional training (in content) may still be inadequate, or of the wrong sort, but, at least in quality, they are improving, rapidly and radically. Too much attention may perhaps be paid to remote and recondite fields, and too little to developing expertness in those obvious and elementary subjects that nearly all will teach, at least at first; and the difficult art of teaching may be too frequently left to Fate; but our content-training, if not adapted to the young teacher's immediate needs, is at least substituting for the easy superficiality of earlier days a substantial and solid grounding in the underlying philological and literary knowledge that no trained teacher may wholly neglect.

So, in raising the question of the adequacy of the present training of our future teachers (not the erudite guides of advanced specialists, but the educators of immature pupils in school and college), we may begin with unqualified recognition of the distinguished merits of our collegiate and graduate work on its purely "scholarly" side, as distinguished from the practical and the pedagogical preparation of intending

teachers,—using the terms "practical" and "pedagogical" in the sense of equipment with knowledge and technique essential to success in the classroom.

Now what does the teacher of high school boys and average college classes really need in order to do his work successfully? Good personality, of course; likewise a good mind and the teacher's instinct. But what attainments should be added to Nature's gifts? What but accurate and ready command of the language, familiarity with the countries and the literatures that he must make his classes understand and love, and mastery of the art of inspirational instruction? In more prosaic terms he must be able to read, write, *pronounce and speak* French, Spanish, or Italian; he must know about France, Spain, and Italy; he must have more than a bowing acquaintance with their history, modern literatures, geography and civilizations; and he must in some way have *learned how to teach*.

It remains, then, to consider how much of this immediately necessary equipment for teaching the Romance Languages a student is likely to get in his college and university training. The situation can be most easily accounted for by considering the purpose and organization of our school, college and graduate courses. The elementary language work, even when it lays stress on careful pronunciation and command of the languages, is, properly enough, designed to educate the average man, not to train the specialist; as often as not (quite properly also) it centers its whole attention on reading. Courses devoted entirely to literature follow next in order in college and on through the graduate school, in which the philological courses are added. In this program the advanced technical study of pronunciation and syntax, essential to success in the teacher's immediate work, finds no explicit place; training in the art of teaching is not even mentioned.

This program is saved from complete inadequacy by the wise insistence that intending teachers shall get for themselves what the courses do not give them,—that is that they shall go abroad for their pronunciation, conversation, syntax, and knowledge of foreign countries. The results have, in some cases, been all that one could ask. In others they have been far from brilliant, for two very obvious reasons: (1). Not enough of our intending teachers spend a reasonably long time abroad; and (2) unsystematic efforts to "pick up" pronunciation and construction (sometimes under inefficient native teachers, or in an American colony) cannot take the place of wise training in phonetics and syntax under expert American scholars.

Let us not slander the present situation. The training now given is, in many ways, all that could be desired. In good universities and colleges there is ample opportunity to study the modern foreign literatures under inspiring, or at least competent, scholars; some syntax can be acquired in the intermediate courses, though it is unfortunately not carried far enough, nor definitely related to professional training; pronunciation gets some attention in the early language courses, and the courses in phonetics help to give it a little incidental treatment, but too much is left undone in the actual perfecting of the teacher's speech and in showing him how he may teach others to pronounce; courses about the countries and their civilizations are usually there, to be taken if the student wants them; conversational ability may at least get a start.

Departures from the conventional program above described exist, of course. As we analyze the situation in our more conservative colleges and universities, we should not fail to recall that a large and increasing number of others are already offering the type of training advocated herein. In fact it may almost be maintained that this paper should have been published ten years ago (at which time it was first contemplated) in order not to be wofully behind the times. But even if the time has gone by for the claim of pioneer work, possibly the battle for better training may not be yet so definitely won as to make all such discussion superfluous.

To the criticism implied in this analysis of the situation, our conservative colleges and graduate schools will probably reply that, having either average students to educate, or prospective college professors to train, there is no legitimate place among their undergraduate or graduate courses for such things as teacher-training and practical phonetics. This hardly seems a sufficient reply, when we consider the tremendous importance of expert linguistic knowledge to the beginning teacher and the fact that such courses may with perfect propriety be made part of the advanced work in a college of liberal arts; for teacher-training we shall at present make only the modest claim that it *may* prove valuable and that one semester course is not a high price to pay for that possibility.

Even the graduate school should remember the following facts about those it is training for the teaching career:—(1). Among our advanced students are many who will never hold positions demanding advanced scholarship; all, or nearly all, of their teaching effort will be devoted to ordinary undergraduate work—or even to school work—for which a ready

knowledge of the simpler things, and above all teaching skill, are the only essentials; (2). Practically every one of the others,—the specialized savants of the future—will earn his living for several years to come by teaching (or trying to teach!) younger college classes; (3). A wider extension of advanced graduate work on the part of teachers in the lower ranges of school and college teaching should be encouraged by stressing the opportunity to secure in the graduate school (unless advanced college courses have met the situation) courses in applied phonetics, in advanced syntax, and in the art of teaching, along with literature and the less directly "useful," but highly desirable, work of a more recondite scholarly sort. It may perhaps be in part because of this failure to include courses in immediately useful content (as well as in the technique of teaching) that our advanced college and university classes do not attract more of those intending to teach the modern languages, and that so many are content to attempt their task with such meager equipment. If, on the other hand, the process of methodizing at the expense of content has even gone too far (as some think), then here is a golden opportunity for university men to save the situation by injecting a conservative and sane form of teacher training into the preparation, while retaining the more substantial content.

Since, then, practically all intending teachers in our advanced courses in Romance will have at least to pass through the elementary stages of teaching, can it not be argued that our college and university authorities will be doing a genuine public service by offering every opportunity for the acquisition of those simple and immediately useful things that distinguish the good teacher from the bad,—command of the subject in hand and mastery of the art of teaching?

As a matter of fact this proposal does not imply a radical change. The courses in literature would continue practically as at present, with possibly a shade more emphasis on the modern periods. Courses in civilization, history, philology and the like would of course be pursued by thorough students and brought vigorously to the attention of even the elementary teacher. Research would be scorned only by those ignorant of its fascination and value.

The practical program here advocated is extremely modest. To a good grounding in language and literature, with a reasonable equipment of history, geography, and the like, it would add these requirements:—(1). One year course in advanced syntax, of at least one language, especially studied from the teacher's point of view. Where classes are small it may be

necessary to combine pronunciation and syntax in one course. (2). One semester course in the phonetic study of French pronunciation (with Spanish and Italian sketchily included, or better, treated in a supplementary semester course); (3). One semester (or year) course in the study of aims and methods of teaching; (4). Some requirement as to residence abroad or summer work at home for the special purpose of learning to speak.— All of this can be accomplished by an undergraduate, but none of it is beneath the consideration of graduate students.

II

To this neglect of equipment in fundamentals and of attention to the development of proper teaching skill may be added the undue lack of consideration for such qualifications in the appointment or recommendation of young teachers, even for posts which, though nominally of university grade, may imply the handling of freshman and sophomore classes in language and elementary literature for many years to come. For such jobs the promising "scholar" has too long been the favorite,—as though learned research connected with the influence of Hugo on Portuguese literature or the behavior of the vowel system in some Italian dialect were a guarantee that the young virtuoso will meet with any success whatsoever in making the Romance languages and civilizations live for undergraduate classes.

"It has been charged that . . . . ambitious men regard their elementary classes as a necessary evil, a purgatory, release from which will come when they can find a publisher for a treatise on some topic so obscure that no one hitherto has considered it worth investigating. Hence in our larger institutions, if my information is correct, much elementary work, instead of remaining in the hands of real teachers, experienced men, interested in their work and in their students, men with prestige and of recognized character and ability, is apt to be passed along from one brilliant and scholarly youth to another, each dropping it at about the time he might have learned enough concerning it to begin to do it effectively" . . . . . "If a man's field is research and not instruction, why not employ him to do research work, let him have a seminar, give an occasional lecture to advanced students who could appreciate it, and excuse him entirely from ordinary teaching?"[1]

[1]Snow *op. cit.* p. 34. (See *Note* at the end of this article.)

The cause of the trouble has been the confusion of gifts; advanced or productive scholarship does not imply teaching skill or knowledge of elementary essentials, and vice-versa. It is just as objectionable to subject an elementary class to a "scholar" who cannot teach the elements as it would be to impose on graduates an ignoramus who is merely a good teacher. If a combination of the two qualities is the ideal, it is an ideal seldom realized, and if we must choose, we shall be obliged to admit that, just as the graduate class needs almost no pedagogical guidance in the presence of the great scholar, so the elementary class can without much loss dispense with specialized scholarship and talent for research, provided its instructor be a real teacher with a reasonable equipment. When the ideal combination of scholar and teacher is not at hand, a method of segregation will have to be worked out, through which our born scholars without teaching ability will be kept away from "mere teaching," and our born teachers without high scholarship be made to understand that the career of a "mere teacher" is honorable and worthy of reward, but that it does not lead automatically to graduate courses by the mere lapse of time.

The result of this confusion has been threefold. It has brought graduate scholarship into contempt in certain hair-trigger minds, generalizing from these obvious abuses; a doctorate has actually been voted a drawback! It has imposed upon some university freshmen clumsy savants without an atom of teaching ability and often with inadequate linguistic equipment. And it has allowed successful teachers of only moderate scholarship, and this in the lower reaches of the subject, to assume that they would inevitably fall heir to graduate courses some day.

It should hardly be necessary to defend oneself against the charge of belittling advanced scholarship, or even research, when one is only insisting that teachers shall know how to teach, and be expert in what they are teaching, however elementary. The most highly specialized erudition is a glorious thing when not inflicted on freshmen as a substitute for the knowledge of the simpler things and the ability to teach them. No teacher can do without scholarship, and some would be better for a lot more of it. Productive writing is often an excellent tonic for the slave of class routine, the popularity specialist, the gossipy, the shallow, the dogmatic, and the conceited; to submit some carefully worked out piece of reflection or investigation to the critical scrutiny of the scholarly world is a different thing from laying down the law before a group of innocent undergraduates; for good or ill, one gives oneself desperately away.

And, in spite of all that may be plausibly said in favor of our present contentions—notwithstanding also the progress that has been made—there should be frank recognition of the possibility that the good old way may not have been so bad after all. Certainly if teacher-training be essential, then most teachers now in middle life know nothing about their business; and the quality of teachers now being turned out by our supposedly neglectful conservative institutions should make one hesitate to criticize intemperately. Because of these important considerations, the contentions of this paper are offered with all possible reserve. It contains no wild assertion that everything is hopeless, but only a modest suggestion that there may be room for improvement; and this of course must be true, unless the reactionary view is correct that the present situation (either because it is perfect or because it is hopeless) can never be bettered. In no radical mood the suggestion is here offered that better teaching might result in our collegiate work if proper equipment and teaching skill were recognized in the appointment of instructors, and if training in the essential elements and in good teaching, were offered as an important part of professional preparation. In other words, if a little explicit attention were given to the business of *teaching* as contrasted with *knowing*, and if the things known were always the things needed, there would be fewer blunders and less crude experimenting by our younger teachers. Though the neglect here described need not be classed as a major tragedy, it is to be deplored as the loss of a clear opportunity for the improvement of modern language teaching.

III

These extensive preliminary remarks should not be allowed to obscure the main issue, which is a discussion of the merits of the Teacher Training Course in Aims and Methods. Beginning with a recognition of the fine opportunities already in existence for the acquisition of substantial scholarship, we found ourselves noticing that some elementary but essential things are too often left out, that the art of teaching is usually left to chance, and that good appointments too frequently go to men who, while they may have high scholarship, certainly have inferior teaching ability and very little real equipment for the business in hand.

The emphasis in this article is intentionally placed upon the training of teachers in aims and methods, because the explicit teaching of those subjects is least likely to meet with approval by conservatives. It is felt also that, once teacher-

training is firmly established, the director of such work will see to it that the essential linguistic equipment, along with attention to courses in civilization and the like, shall not be neglected.

Would a complete change of attitude regarding teacher-training be all gain? Possibly not. If a man is a fool, it may be better not to buttress his folly with the conceit of pedagogical jargon and methods. Brains, personality and common sense have always made, and will always make, better teachers than any amount of normal training. But is it necessary to contrast? Why not combine? Must we think of the problem as personality and scholarship *versus* training, or personality and scholarship *plus* training? A dispassionate consideration of the things a sane Teacher Training Course might aim at will help us to substitute fact and reason for prejudice and tradition as we ponder these questions.

Let it not be supposed that the writer is sufficiently naïve to identify teacher-training with teaching ability. But, in view of the fact that present methods of selecting college and university teachers often minimize both, we may make two cautious contentions: (1). That teaching ability should be considered essential in those expected to teach; and (2). That elementary teacher-training may at least be thought of as a possible aid to young teachers. From this point our attention will be centered upon the Teacher Training Course in Aims and Methods, with an occasional side glance at essential content training.

As we approach the question, "What may the intending teacher hope to get from a Training Course in Aims and Methods?" we may be aided by some general statements on broad lines made in a recent *Atlantic* by an expert educator: "Devotion alone does not distinguish a calling from a trade. The law, medicine, and the ministry gained little until they added to their stores of highly specialized knowledge a firm insistence upon professional preparation. Teaching in some places is not far above medicine in the days when any person with a bottle of pills might style himself a doctor. The quack appears in every profession. Sadly enough, the efforts to advance teaching through insistence on professional preparation receive some opposition within the ranks of teachers. Just as it was the thirty-one Boston schoolmasters who opposed Horace Mann in founding the first normal schools, so it is some of our own university and college faculties who are antagonistic to-day to the professional training of college-bred teachers. 'They need no training,' said a professor at

Yale. 'Let them learn to teach by observing the mistakes of their teachers.' Just as a man should learn to operate an automobile, we might add, by watching another man run it into a lamp-post. So long as professional training is regarded as unnecessary for teaching, we shall continue to read correspondence-school advertisements that herald among their phenomenal achievements the lifting of one pupil from brakeman to railroad president, and another from teacher to stenographer. But more and more effective is becoming the demand for professionally trained teachers, as more and more clearly we perceive that nowhere, from kindergarten to university, does teaching come to its own until the craftsman is prepared and inspired to develop for himself some of the materials, and methods, and larger reaches of his work. Fortunately, as schools are becoming more flexible and less institutionalized, adaptable to independent variation, freer from the domination of opinions and politics, and illuminated with scientific and socialized points of view, more and more are the ranks being recruited from experts—men and women with professional outlook."[1]

In applying these generalizations to the specific problem before us, we may note first certain vague but basic things which, though some born teachers may attain them unconsciously, would develop more quickly and powerfully by receiving explicit recognition, and which need particular attention also for the sake of those less gifted ones who otherwise would risk missing them altogether. These vague but basic things are the thoughtful attitude toward the high calling of the teacher, and the "professional spirit." Simply by hearing a serious discussion of inspiration, purpose, and plan in the life of the teacher of languages, and by associating with eager souls planning for such a life, it may dawn upon even an indifferent neophyte that, after all, teaching is something more than an easy way to earn fifteen hundred dollars one's first year out of college. He will discover that there are various ideals in education in general and in modern language teaching in particular; and unless he is to be a mere drifter, he must ultimately choose which ideal or what compromise course seems to him most worthy. The question of the method best suited to his ideal and the various devices that help make a method work will therefore arise immediately. Many appear to start teaching without giving these fundamentals a thought.

With the thoughtful attitude should come the professional spirit—unconsciously through contagion, and consciously

[1]W. T. Foster, "The Morale of the School," *Atlantic Monthly*, June, 1923.

from discussion and suggestion. One's aim may thus early develop into something bigger than a mere living. One sees the high possibility of influencing Young America. One catches glimpses of ripe scholarship, inspirational writing or patient research. One learns of teachers' associations, and of reviews dealing with the teacher's problems. If these things are good they should not be postponed or left to chance.

A thoughtful attitude toward the career may involve also more serious thinking about one's training for that career,—whether the teaching emphasis will aim toward university, college or school; how the experimental stage will be planned; what graduate work will be done at home and abroad; and so on. Far too many drift through these problems as the winds of chance may direct, and discover only when it is too late the lamentable losses that a little intelligent planning would have prevented.

And of course there will be the discovery of concrete ideas upon the general organization of a course, the methods preferred, and devices available. Every intelligent teacher of languages will at least wish to know what the Direct, Reform, Compromise, and Grammar-Translation methods stand for, to consider each method with his own reason (and not his instructor's habits) as guide, and to begin to decide how far he will follow each. — No such teacher has made the beginning of professional equipment until he has at least learned what the phonetic method of teaching pronunciation is, and has begun to consider how much physiology, transcription, and sound-drill, he can use to advantage. — What is inductive grammar study? This principle may be neither wholly good—nor entirely bad—but it is sufficiently modern to be unfamiliar to a large proportion of teachers, and sufficiently important to demand intelligent and early consideration by all who take their calling seriously.—Is Palmer right or not in his important and enlightening discussion of the distinction between "memorized" and "constructed" matter and the need for giving more attention to the former?[1] If he is right, such simple difficulties as the correct use of the article, and of many other common units of speech, will become automatic rather than the painful result of conscious rationalization,—a pretty important possibility in language teaching, a simple principle to follow in moderation, and a help to good teaching of which one can hardly afford to be ignorant.

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[1]Harold E. Palmer, *The Principles of Language Study* (World Book Co., 1921), chap. XVI. Cf. also his *Scientific Study and Teaching of Languages* (Harrap, London, 1917.) pp. 103 sq.

"All very fine—and also very obvious," the skeptic may be tempted to comment; "but must one take a formal course in order to develop elementary decency toward one's life-work?"

Very obvious, indeed,—to some at once, to others after a time, to others never, unless the way is pointed out. One need not assume low motives nor complete stupidity in the whole teaching profession; but one may assume (because one knows it) that too many begin with no ideal at all beyond the pay-envelope, that for others there is no centering of ideal on definite problems, and that practically all are at first ignorant of points of view and method of procedure that experience has worked out, all of which can be passed along with untold benefit to the beginner.

To illustrate by two homely experiences in the realm of classroom devices: (1). A nameless teacher beginning his work in a certain university starts with the traditional routine of so much composition and so much translation each day, only to rediscover that his pupils are doing with their composition what his own classmates had done of yore with theirs,—piecing it together from rules and vocabulary (or copying from a friend), listening tolerantly while it is dissected in class, and, until the semiannual cram comes due, learning only what they cannot avoid retaining. How simple a change it is to subject those classes to *weekly review tests* on the composition! Whether pieced together or copied, the material must now be assimilated by the mind, and the gradual week-by-week assimilation accomplishes results that two semester examinations cannot approach. The simple device seems self-evident as soon as suggested; it is readily adopted and students now absorb gradually instead of cramming twice a year. But the disciples of tradition would have it either that there are no new devices worth discussing or that such new ones as may be desirable will occur to everybody spontaneously.

(2). Or take translation. Many of us believe in translation as the quickest, surest, and most convenient way for teacher and pupil to discover whether or not we have the meaning of what we read; but rigid adherence to translation is deadening. Try your class out with a "free reproduction" lesson,—that is, an assignment to be read but not translated, the gist of it to be restated in class in the original, either orally or in writing. Or try even longer lessons on the "reading for substance" basis, and as a test dictate a few easy questions in French (or Spanish) on this material, requiring the answers to be written in class in the foreign language; you will here

combine a really useful dictation exercise, and a little free composition, with an interesting development of the reading material that will surprise you. Think of the teachers who, beginning blindly with traditional methods, develop, after years of experimenting, new lines of approach that simply make their teaching over again. No one new way is inevitably better than the old way, but out of a score of suggestions might come one or two that would throw a flood of light on the young teacher's problems. Shall we give him that light or not? Must every teacher teach ten years before making use of weekly tests or learning to vary the forms in which reading is to be done? The most brilliant are unlikely to originate every good device, or at best will probably do so disappointingly late in life. Is there any simpler avenue of access to experience than a course in which various authors express their views through a seasoned teacher?

Or take the possibility of oral work, even the simpler sort derived from lesson books not of the direct method type; or the use of songs,[1] etc. Is it not worth a little of the intending teacher's time to get a discriminating knowledge of at least the existence of these processes? Have all the good ideas been discovered long since, and are they now in universal use? Are they all going to come to us all in the natural course of events?

Furthermore a training class often can and always should provide practice-teaching that will at least rub off the roughest corners and carry one through the first attacks of stage fright; and it may very well give definite instruction in the actual content of the various lessons (outline of material, reference works, drill devices). Finally, the class should be introduced to as much scientific educational theory as it can digest without danger of bewilderment or the distrust that unpractical theories tend to create.

Hence, when we are told that such training courses are useless because "the necessary devices will occur to any intelligent teacher," we must ask if this is the only profession in which the accumulated wisdom of experience is of no value to the beginner, the only art in which the apprentice can learn nothing under guidance.

This paper proposes to suggest a program built partly upon the lessons of experience and partly upon opinions of what one would wish to do under ideal conditions. On the theory that any intelligent teacher will himself discover what he

[1]See for instance *Mod. Lang. Journal* III 8, 365.

needs, the description of our experiences and ideals can of course have no interest; if there be some who do not share this view, the story of our work may not be without its merits. Our narration can have little value except in so far as it may encourage others to attack the problem with the slenderest equipment and point out how the way has gradually been cleared.

The Training Course for Teachers in Clark University had its humble beginnings in a request for a more advanced linguistic course by some men majoring in French, many of whom were planning to teach that language. It has worked out its own salvation by experiment alone and has abandoned some lines of activity which proved of little value.

At one time or another this course has included: (1) a special study of pronunciation and syntax from the intending teacher's viewpoint; (2) practice teaching of French and German according to various methods; (3) pedagogical lectures,—on aim and method, theory and practice; and (4) discussion of collateral reading. During the brief period that my colleague, Dr. Charles E. Lyon, was able to collaborate from the German viewpoint the course was enriched and broadened by his contributions.

Our pronunciation work, through an advanced manual, sought to improve the intending teacher by further drill and careful work in transcription, as well as pedagogical discussion.

In syntax, having far less time than we needed, we aimed to create an attitude rather than to cover the field. Certain available reference grammars were listed, references on given topics were studied, and then the problems were discussed and the students' results tested.

In the future our pronunciation and syntax are always to be separated from the course on aims and methods and more time will be devoted to each subject. Courses in literature for the intending teacher are of course entirely distinct and are taken for granted.

Our practice teaching has been done under most unfavorable conditions. We have been limited to the artificial situation of teaching a little class of classmates, some of whom knew the subject quite as well as the teacher. But it has given our students a start in classroom technique, and a surprising number of useful suggestions occur to the listening critics, even under those unfavorable conditions. Observation of this practice teaching also gives the instructor a much better basis for rating the probable teaching ability of untried condidates whom he must recommend for positions. The helpfulness of this exercise makes one eager to see practice

teaching at work in some large university or some city community, where bona fide classes of beginners can be found.[1]

The ideal teacher-training course, then, will include some practice teaching, but will relegate pronunciation, syntax and literature to other courses. About conversation in college there may be some doubt, but of the other elements there can be none, and the Training Course, through its director, may function unofficially to win intending teachers to high standards of preparation in content (the kind actually needed for elementary teaching—not the learned technicalities of the "scholar"), while it endeavors more explicitly to stress the art of good teaching. Its most interesting occupation will be the discussion of pedagogical problems through lectures, collateral reading, and criticism of practice teaching. The lectures will aim to describe ideals and problems, and to suggest objectives and remedies. Every opinion put forth should be subject to discussion—even dispute. Various articles and books should be specially assigned to members of the class who will present carefully digested synopses and lead the discussions. No views of lecturer or author are accepted on faith. The topics of the lectures we may now describe.

First of all the merits and content of the course itself are taken up, as in this article. Thus the class will know what to expect, and in the discussion of his proposals the instructor may get valuable suggestions. The views of Breul,[2] Sweet,[3] Warshaw[4] and others should be discussed in this connection.

The next topic logically seems to be "The Preparation of the Teacher for his Life-work," including not only suggestions about planning one's scheme of study (professional and cultural) but also the general plan of one's life. It may be true that a good man cannot be kept down—ultimately,—but discretion in looking ahead and in making the most of one's better foot certainly affects the rate of advancement and the degree of one's usefulness. An immature student may not know immediately whether he ought to aim to teach in school, college or graduate school,—whether he will be primarily a teacher, a writer, an administrator, or a researcher; but he can understand the difference and begin to reflect. If he plans to do large amounts of advanced graduate

[1]Compare further the suggestion of Laura B. Johnson (*Mod. Lang. Journ.*, VII, 1).

[2]K. Breul: *The Teaching of Modern Foreign Languages and the Training of The Teacher* (Camb. Univ. Press, 1909).

[3]H. Sweet: *The Practical Study of Languages. A Guide for Teachers and Learners.* (Holt.)

[4]Works quoted in *Note* at the end of this article.

study he should consider when and where. He should know the value of summers abroad and summer study at home. He may consider the use and abuse of the doctorate, the pros and cons of the European university, how health reacts on disposition and clear thinking, the help or hindrance of early marriage in one's career. Even such humble details as French pensions and American teachers' agencies may be mentioned. A concrete program covering the accomplishment of one's advanced study and apprenticeship in the classroom is modestly suggested as a sort of working hypothesis.

The wise use of books—the teacher's chief intellectual nourishment—may be touched upon in a lecture or two, in which will appear bibliographical suggestions, methods of handling books, and a select reference shelf.[1] A card catalog containing a selected and classified bibliography for the modern language teacher—texts, reference works, books and articles on teachers' problems—is part of the machinery of the course; this is critically studied by the members of the class, each of whom is encouraged to add to it and to start his own individual set of cards by copying the references indicated as the most important.

Certain suggestions concerning "The Preparation of the Lesson by the Teacher" aim to hint to the beginner how he may establish a high ideal of scholarly thoroughness for himself, improve his intellectual background, and make intelligent use of his tools. These hints have to do with the approach to the new text, the use of the reference shelf, the keeping of careful notes recording pedagogical experience or data not easily accessible, and so forth.

As soon as possible we should undertake the discussion of our central topic,—"Aims and Methods." Why study French (or Spanish or Italian)? At what age shall we begin? What should be the chief purpose,—reading, understanding, writing, or speaking? Is there such a thing as disciplinary value? What methods will work best toward various aims,—at various ages? What devices will enrich our method?

Here, of course, as the several topics emerge, there must be much collateral reading from authors of different—even conflicting—views. Abstracts will be made of articles and books read, and discussion launched upon this foundation. Reading, grammar, composition, pronunciation,[2] oral ex-

[1]Discussed by the present writer in *The Mod. Lang. Journal* of January, 1923. ("*The Teacher and His Books.*")

[2]As discussed by the present writer in *The School Review* XXII, 8, and *The Modern Language Journal* III, 8.

ercises,[1] the direct method, and literature are all discussed methodically. In connection with the direct and reform methods the class in Clark University meets for a lecture or two in the Pedagogical Museum, where the illustrative material is inspected.

Pronunciation will receive special treatment. How far may it be neglected or stressed? Is it essential for the teacher to have a faultless pronunciation? Is this possible? How may the teacher perfect his pronunciation? The phonetic method will be explained, the differences between phonetic and orthographic difficulties made clear, transcription discussed, the merits of the International Phonetic Alphabet considered, bibliographies listed, devices and exercises suggested.

The subject of "Examinations and the Grading System" appears in our series of topics. We endeavor to start our future teachers thinking wisely about these problems, not scorning even such petty topics as the merits of the per cent method of marking, and the question whether an examination is more fairly rated by making the single paper the basis of procedure or by taking one question at a time through all the papers. Certain suggestions as to gathering material for tests are also offered, and sample examination papers are inspected. "Prognosis tests" should be considered in this connection.

"The Practical Administration of a Course" is the title of an unpretentious lecture in which a few concrete working suggestions are collected as a sort of a starting basis for the young teacher who is wholly without experience: these touch upon method, texts, attitude, taking into account varying ages in the pupil and degrees of efficiency in the teacher. We do not expect to be taken too seriously nor to have our suggestions followed blindly for very long. The presence of a mature student or an experienced teacher in the class would lead us to hope for valuable contributions.

"When, under ordinary conditions, the student leaves college, he has an acquaintanceship with the limited number of books which he has used. But it must be observed that he has known these books simply from the standpoint of the student, and may commonly think of them separately only by the color of their covers. They have been tasks to him, not instruments. He has probably never given a thought to them as teaching equipment. As soon as he becomes a

[1]See *Modern Language Journal* VI, 8. Many important discussions are to be found elsewhere.

prospective teacher, his viewpoint must necessarily change."[1] "While experienced or naturally gifted teachers do not depend on a textbook for their success, the textbook may be a real factor in determining the success of a novice . . . . Therefore care must be taken to supply the class with standards for evaluating texts, showing them how to look for a text that will best enable them to realize the aims they have set for themselves, and the methods they hope to use. Texts representing the various types should be brought to class and examined and discussed."[2] The abysmal ignorance of the beginner needs no further argument; we have but to think of ourselves twenty-five years ago. Merely to list the types of texts, to point to a little row of typical texts, and to suggest bases for judgment and comparison, will be of inestimable value. Besides these, the class may learn of an almost unlimited field in the way of paraphernalia such as maps, pictures, etc., that help to enliven the work of teaching.

Almost every capable teacher has his lesson plan, consciously or unconsciously; the beginner—who is rarely a capable teacher—usually has no such plan, conscious, unconscious, or subconscious; he follows the book,—or flounders. Elaborate planning may go too far, for, after all, our program is a simple one, and persistence rather than pretentious entertainment is the basis of progress. But there is such a thing as a planned lesson, and the future teacher may be told that. And then, he may learn of certain simple and fundamental things that should not be left to chance, clear statements about the next lesson, with such preliminary drill as may be needed; necessary review of recent work; allowing sufficient time for the essentials of the day's lessons (and never permitting side issues to usurp the field); rest, and relief from monotony; drill in pronunciation; time for tests. A written lesson plan is more tangible than a "general idea in one's head," and is to be recommended to the beginner; possibly some older teachers underestimate its value.

Something should be said about the teaching of literature. Why study French (or Spanish or Italian) literature? And how? Shall we lecture? If so, in French or in English? Before or after the student has read his material? Shall we translate? How can we stimulate critical appreciation?[3] What is the "method of contrast?" Are anthologies to be commended? If so, how can they best be used?[4]

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[1]Warshaw.

[2]Young.

[3]The discussion is based upon an article printed in *The Modern Language Journal* II, 2.

[4]See *Mod. Lang. Journ.*, VII, 3.

More important than the instructor's lectures are the discussions based on the collateral reading. This is selected with a view to catholicity, practical value, and gradation from the simple to the more complex. Radicals will look upon the *Report of the Committee of Twelve*[1] as long out of date; but it provides a clear and simple approach to our problems. It can be best offset by reading Breul's book from the "reform method" angle, or Krause's *The Direct Method in Modern Languages*[2], or Bahlsen's *Teaching of Modern Languages*,[3] or E. Gourio's *The Direct Method of Teaching French*.[4] Bagster-Collins's *German in Secondary Schools*[5] is a thoroughly non-partisan study of the general modern language problem. *The Teaching of Modern Languages* (thirteen authors, Heath) gives many points of view from which we may select. Palmer's two books[6] are the most stimulating of recent studies,—even where we do not agree with him. Articles on justification, aim, method, devices, problems, will be taken up in connection with each topic. Discussions will usually be led by the members of the class, who will prepare special topics in rotation.

In the course thus defined there would be no inclination to stress method at the expense of content; it is a modest effort toward a little attention to the *art of presenting* our all-important content. Not a degree in education is demanded, but a single course running through one year—perhaps only one semester; the proper linguistic and literary courses would be assumed, and one brief course on some broader educational topic recommended.

Such a process might conceivably result in the production of small-minded mechanical drill-masters, perfect in minor technique, but missing the great spiritual issues of the game of education. In the sciences, for instance, it is argued that the attitude of curiosity and experimentation is worth far more than all sorts of accuracy and organization of material. The reply is simple. The object of the training course is to train good teachers. In science or in language it will deal with fundamentals, and if scientific curiosity be the one great essential it will put that first. Its one dogma is that good teaching and bad teaching are not identical and that the road to good teaching may be sought under guidance.

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[1]Heath.
[2]Scribner.
[3]Ginn.
[4]Houghton Mifflin.
[5]Columbia Univ. Press.
[6]See page 319.

Even in elementary language work it will seek first the great spiritual impulses and psychological principles, using drills and methods as machinery to set these free; and even in literature or in science it may discover that esthetic appreciation and intellectual curiosity rest on a surer foundation when facts are carefully organized for the learner and patiently drilled into his consciousness by intelligent methods.

As here conceived the guidance of a training class of this sort need not occupy the whole time of one director or instructor. There are reasons for believing that it had better be in the hands of a practical teacher of languages with the usual philological and linguistic equipment, and some attainment in research, who, outside of his Teacher Training Course, would teach along ordinary lines, rather than under a specialist in "education" with no intimate knowledge of our real problems. The director of the Teacher Training Course might be qualified to give the higher specialized training to intending teachers in the pronunciation and syntax of *one* (rarely more) of the languages. If he is the right type of man he will act as a sort of co-ordinating center for the teacher-training of his institution, and unless certain clear signs should fail, the product of that training will be sought for by those who get to know it, and it will help to raise the professional tone of the region it serves.

Without good material a mere machine cannot even make good shoe buttons. The Teacher Training Course is more than a machine, but it does not pretend to manufacture good teachers. It assumes good, well-equipped material and gives it a better chance. It raises questions of the thoughtful attitude, the professional spirit, wise preparation, proper equipment, a defensible purpose, a reasonable method, and some insight into workable devices; and it raises these questions on the threshold of one's career. It gets its suggestions from the best that is being written, from lectures by the instructor, from class discussions; it is thus a means of contact with accumulated experience and reflection on the art of teaching the modern languages. There are those who do not consider this superfluous.

NOTE. No systematic attempt has been made to discover all the literature on the subjects treated in this paper, but mention may be made of a few articles that the writer has found interesting, or at least existing. Particular thanks are due to Professor C. E. Young, of the University of Iowa, for his kindness in loaning the manuscript of his unpublished address before the Modern Language Association of America

(Dec., 1920) on "The Function of the Teacher's Course in the Training of Modern Language Teachers." Mr. W. B. Snow's paper, "Wanted a Teacher" (*Bulletin of the New England Modern Language Association*, VII, Sept., 1917) should certainly be read. "The Utility of Teaching Devices" by J. Warshaw (*Mod. Lang. Journ.*, IV, 3 and 4) and the same writer's "Teachers' Courses in Spanish" (*ibid.* V, 4) have great collateral interest. Other important articles, read but not quoted, are:—Oliver W. Johnson's "University Training of the High School Teacher of Modern Foreign Languages" (*Mod. Lang. Journ.*, III, 3: of general nature; advocates study of phonetics, cultivation of a speaking knowledge through direct method courses, study of syntax, literature, training courses in teaching); George I. Dale's "Teaching New Teachers to Teach" (*Hispania*, VI, 2: proposes teacher-training courses for Spanish in summer schools, particularly for those who have neglected such training in the winter term); Laura B. Johnson's "Teacher Training Through Participation" (*Mod. Lang. Journ.*, VII, 1: suggests that intending teachers get classroom experience by becoming members of elementary classes, as students and leaders of small sub-groups); Albert W. Aron's "The Linguistic Background of the Modern Language Teacher" (*Mod. Lang. Journ.*, VII, 2: an interesting discussion of the value of phonetics, historical linguistics, and language psychology); Hayward Keniston's "The Rôle of the Graduate School in the Training of the Modern Language Teacher" (*Mod. Lang. Journ.*, VII, 1); A. C. Boyden's "Teacher Training is Indispensable. Shall it be Raised to Collegiate Rank?" (*Education*, XL, 571). Numerous other titles of articles of lesser importance could be listed. Incidental reference to the subject in standard books has little direct relation to this paper.

ACROSS TWO GENERATIONS

By G. Stanley Hall

I have been asked what I would say to the circa one hundred thousand young people who took their academic degrees in June in this country, if the message of an oldster, who graduated fifty-six years ago, could be broad-casted to reach them all. That it could ever do so under any circumstances is, of course, preposterous; nevertheless the idea intrigues me.

My class looked back upon the close of the Civil War from about the same distance in time that you look back upon the Great War. Most of us of the class of 1867 were a little too young to enter our War as so many of you were too young to enter the Great War. There are, however, a few similarities, some superficial and some deep, between these two graduation days, yours and mine.

The harvest of death was vastly greater in the Civil War in proportion to the population, and the disorganization of industry, of life and ideals, and even of prices, came far closer home to every one. Great and new questions were wide open, and we felt that we must go back to first principles and lay again the foundations of our national life. Again, there was a strong wave of magnanimity at first towards the South. Grant, in the surrender at Appomatox, allowed Lee and his officers to keep their swords and small arms and their horses "because you will need them in the Spring planting," and Sherman in the West was no less magnanimous with Johnston's army; but Thaddeus Stevens and his policy of treating all the rebellious States as "conquered territory" prevailed, and the awful carpet-bag régime followed, which has its psychological analogue in the French occupation of the Ruhr, so that for years after the war the problem of reconstruction went backward instead of forward. Again, Lincoln, in his emancipation proclamation,—so long delayed, as was our entrance into the Great War—and by the spirit of his classic Gettysburg oration, inspired sentiments in this country not unlike those of Wilson's fourteen points, and a feeling here as deep as the popular acclaim which greeted Wilson in his triumphant tour of Europe just before the Peace Conference at Versailles. The spirit of Lincoln was lost in the policies of Congress that followed his death, as

Wilson's was in the struggle that smote him down. Jefferson Davis was not hung "on a sour apple tree" as popular opinion demanded, but was allowed to live out his life and write the History of the Rebellion, as the Kaiser was isolated and wrote his Memoirs.

The address at our Commencement characterized the year 1867 as the greatest year in all history toward which all lines converged, and from which they diverged, and we were told that no class ever had such opportunities for great service as opened before us on leaving the sheltering arms of our Alma Mater to take our part in the great world's work.

Then there were some sixty odd colleges giving degrees, not including professional schools, while now there are 670 universities, colleges, and professional schools giving higher degrees. In our day it was something of an achievement to prepare for college, for the great high-school movement had not begun and there were few fitting schools, and a far smaller number in proportion to the population went to college. Preparation was almost entirely in mathematics, Latin, and Greek, but in my preparatory school (Williston Seminary) I think we read as much if not more classics than is done in such schools now. As I remember it, in Greek the standard for the colleges that required most, Harvard and Yale, was, besides the Greek reader which was a rather copious chrestomitha, four to six books of the Anabysis, six books of Homer, four orations of Demosthenes, and a little of Thucydides. In Latin several books of Caesar's Commentaries, six books of the Iliad, and four of Cicero's orations, with a little Tacitus, and a severe drill in the grammar of both these languages, pages of rules of which with long lists of exceptions were learned by heart. In college, too, we had nothing else for the first two years, but in the last two years there was much English literature—comprehensive histories of it like Shaw—history, American and universal (Webber), a little French and German in the junior year, and a little astronomy, geology, physics and chemistry, but with no laboratory work; while in the senior year we had logic, ethics and metaphysics, with Evidences of Christianity, rhetoric, class debates, essays, and so forth. There were no elective studies and all took the same courses whatever their plan of life later. Classes were small so that we all knew each other intimately. A few institutions had gymnasia and baseball, with occasional inter-collegiate games, which began during my course.

All the northern colleges were patterned on the English model, but in those of the south,—under the influence of Thomas Jefferson and the University of Virginia which set

the fashion for other southern colleges—the patterns, ideals and methods were imported from France. There was practically no graduate work anywhere, although here and there there were eminent professors, one or two of whom kept a few favorite students a year or two after graduation for more special work. The Johns Hopkins University, opened nine years after I graduated, brought in German methods and ideals, and was the first real university in the country. It was almost wholly owing to its influence that a higher story was built on to our educational system. Professional schools were very few, and none of them save those of theology had endowments, but depended almost entirely upon student fees.

And now looking back through the vista of nearly two generations since graduation, and having, as a teacher, during much of that period observed many successes and failures among those I knew, if I find myself tempted, though with many misgivings, to offer a little of the counsel which the old Baconian maxim assigns as the chief function of age, I realize that advice is a very poor proxy for experience, that it is rarely taken, and that most must learn the wisdom of life for themselves in the school of hard knocks. Indeed, the flood of sapient counsel that flows so copiously from the older to the younger generation every Commencement season is a little like pouring water from a washtub into narrow-necked bottles, and that most of it will be lost.

The first thing I would suggest to this year's graduates is that they will find that however hard they think they have worked in college, life is a far severer school, and that when they are well launched in it they will look back upon their academic years as comparatively sheltered and leisurely. Commencement is a happy designation, for graduation is a little like birth when the infant is thrown out of its pre-natal home into a cold steriometric world, where it doubtless feels at first like a shipwrecked mariner tossed upon a strange and inhospitable shore, where its fundamental functions, even of food-taking and respiration, must be changed; for it is the day after graduation, when life in all its crass reality and its intense struggle to survive really begins.

One of the hardest initial lessons now to be learned is that of concentration. Perhaps there is a little justification in calling a modern college course "intellectual vagrancy." You have smattered, or perhaps little better, in many courses—and all beginnings are proverbially easy—and in most studies you have not gone far enough really to test your capacity. The old German proverb: "*In der Beschrenkung zeigt sich der Meister*," is true in a sense you have not begun to realize.

Even in placental undergraduate life everything to-day is more and more specialized. The last census gives some 19,000 occupations, and we have been told that in the manufacture of both shoes and shirts there are between thirty and forty distinct processes, in performing each one of which the workman may spend his life, knowing little of all the rest. The same is true everywhere, even in science. A great chemist, physicist, geologist, psychologist, never now knows the whole of his field, but specializes in some part of it. In the department to which I have devoted my life, psychology, I can hardly understand the papers in certain of the sections into which our National Association is divided, and the same is true of all experts in all fields. We must know all of something, and then do the best we can with the other part of the precept, knowing something of all things, but it is that which suffers. One who should say to-day with Sir Francis Bacon that he had taken all knowledge to be his field would be a fool. I have myself lately been almost a witness to the tragedy of one of the most gifted minds I ever knew, who took his life because he could not keep up with all the departments and all the sub-sections of the vast scientific field to which he had made so many signal contributions, and in certain branches of which he was perhaps the greatest living authority.

But, on the other hand, there is always this compensation, nature and nurture pre-forms to specialties more and more as the world process of differentiation and integration proceeds. No man is so gifted that he will not surely fail if he chooses the wrong line of work, because we are all weak in some directions; but on the other hand very few are so feeble that they cannot perform important if not signal functions provided only their powers find the right line for their deployment. This then is vital, viz., to find our strong and weak points of interest and ability, for these generally go together, and as the world grows complex this is ever harder but ever more necessary. There is something nearly all can excel in and this is a gospel of hope, but it must not be forgotten that disaster is inevitable if one takes the wrong course. Those who succeed generally find or make their work play, and of all the wastes in the world to-day the greatest is that of misfits between the man and his job, and the great hope of modern tests of mental ability is to mitigate this waste. Thrice happy is he who finds and does the one thing that he loves and can do best; and one of the chief sources of modern unrest is that so many are doing things that do not evoke their best powers. I count myself most happy because, however little I have accomplished, I have been fortunate enough

all my life to be engaged in just what I would have done if I had been a millionaire, and what I would spend my life again in doing if I could.

The old theory of college life was that the student in brushing the circle of the sciences and in getting a little general culture would find himself, but I doubt if as many graduates to-day know just what they are going to do as was formerly the case.

Let us glance briefly at a few of the careers now open:

A. A very few of you, far less than formerly, and still lower than the average in general ability, will enter the ministry. Here it is hard to be honest. A recent skit describes a group of clergymen who agreed for one month to speak their minds without reserve to their flock on the fundamentals of religion, and at the close of the month when they met again they were a sorry lot, for all had lost their pulpits. But really these doctrinaire snags are very few, and are not vital in the larger social and ethical fields now open to the clergy. Thus in most heresy trials there has been some lack of tact on the preacher's part. Candor and frankness need never be made aggressive in a way to give offense. The simple fact is that we have vastly over-estimated the factor of historicity in scripture narratives. We can teach Dante "the voice of ten silent centuries," with no ostensive demolition of the Ptolemaic system of the universe, and we can get the full force of "Hamlet" or "William Tell" without even thinking whether or not these heroes were really persons or myths.

Psychology is teaching us the tremendous efficacy of symbols in all our thought processes, and pragmatism brings a new criterion of truth, viz., its effectiveness, and this all the higher criticism does not touch. I am profoundly moved by Papini's "Life of Christ" which is having such an enormous vogue. But Reinach, who accepts all the higher criticism, is a no less devout believer in Christianity than Papini. Ion, the rhapsodist, who thrilled in reciting Homer, never raised the historic question, but got the maximal edification from it all. Here lies a great lesson for those who have the insight to learn it.

The Bible is literature, the very highest we know, and there is no dogma in it. The best things, and those that are alone really worth while, are things that take place in the human soul itself, and all else is dross.

But religion for those who do not preach is the salt of life. It is the chief hope of the world to-day. Our attitude toward it should not be merely that of conservation but of revival

as well. There I would urge all graduates to cherish and cultivate the religion in which they have been reared. If you are Jews do not forsake the synagogue; do not be too "reformed"; be good Jews and live up to your religion, and no one has a right to ask more of you. I would say the same to Catholics. Your creed and cult, if you only serve and cultivate its spirit, has wondrous saving power. Not only cling to your faith but be proud of it, and the same applies to all other of the great ethnic faiths. Religion is not dead in the world to-day, but only sleeping or half awake, and when its eyes are wide open and its worth is illuminated by experience and by science, there is a deep underlying sympathy between all creeds which at bottom are only variants of the great admonition which can be summed up in the words "Love and serve God and man." Common morality and Social service are common ground in which all should co-operate, and where laymen have functions as well as the clergy. The object of every faith is to subordinate selfish egoism to service, and if you do this you are religious.

B. Medicine now attracts far more graduates than does theology. It rests on the broad basis of biology of which no doctor, who would in any degree fulfill the old ideal of Hippocrates: "Godlike is the doctor who is also a philosopher," should be ignorant. It practically began everywhere with some crude form of psychotherapy, and to-day it is beginning to be again mindful of its origin. Microscopic anatomy, bacteriology and the cult of toxins and anti-toxins have made such marvellous advances in recent decades, and have so reduced the ravages of certain of the most lethal diseases, that the profession has been a little slow to recognize the wide range of symptom groups that are made by and can only be cured by mental therapy. I am making no plea for Couéism, Eddyism, in any of its forms, or even of Freudianism, the greatest of them all, but I would exhort all students who enter this profession to inform themselves, and insist that medical faculties provide instruction, in psychotherapy. The discovery of the immense rôle which the mental content and emotional states play in health and disease is, to my mind, one of the greatest achievements of recent times, and has in it the promise and potency of a higher degree of mental and physiological health than we have been yet able to attain. In the medicine of the future these things are sure soon to come again into their rights.

I find, too, a wide consensus of opinion that young doctors should not specialize too early, but that most should at least

pass some years in general practice to get a better perspective, and to see special disorders in the light of the well-being of the entire human organism and environment. The young premature expert in ophthalmology, gynæcology, internal medicine, pediatrics, psychiatry, and the rest, is likely to ignore indications that come from other functions, and thus unwittingly do harm where with larger experience he would do only good. Everyone, too, must nowadays be his own doctor, as he must be his own religious mentor. Keeping at the tip-top of one's condition is a great art, and makes careers. Most of us live out our lives only half or three quarters as vitally well as we could and should be. Preventive medicine is so little developed that doctors often cannot treat us wisely until symptom complexes are pretty well developed, and there is a sense, too, in which every one as he advances in age must depend more and more upon himself and less upon doctors, if he would be supremely well. (See Riggs, Gehring, Southard, Paton, and so forth.)

C. Many of you will be attracted to the study of law. Here, as everywhere, you will find all grades of ability and merit. In a circular letter I lately sent to a number of lawyers, I was struck by the fact that so many of them feared an increase in the number of disreputable "scheister" practitioners, who are on the quest for domestic and all kinds of petty frictions, almost obtruding their services and occasionally in ways almost suggestive of blackmail. I cannot believe that on the whole this great profession, so essential for the order of modern life, is in danger of degeneration and perhaps of overcrowding, although far more fear this; but, as everywhere, there is "plenty of room at the top."

The body of legislation in this country is immense, and not only uncodified but essentially uncodifiable. A recent pamphlet designates over two thousand bills pertaining to education in the various State legislatures within the last five years. This superfœtation of enactments is confusing, and opens endless possibilities for unscrupulous ingenuity on the part of the attorneys, and erroneous and conflicting judicial decisions.

Senator La Follette in his autobiography tells us that when he entered public life his college teacher, President John Bascom, admonished him to make every legal and political question that came before him an ethical one, and this greatly impressed him. There is, moreover, a most significant movement represented by Roscoe Pound and others to rebase law upon equity and simple justice between

man and man, and this movement along with the great pedagogic invention of the "case system" in our schools of law, has done much to make the way of the young lawyer plain and straight. If there is anything the world needs and wants to-day it is that the spirit of honesty and fair play have free course, and it is to this great profession, more than to any other that the world now looks. Law is also now, whether for better or worse, the chief fore-school for politics, so that the administration of all our institutions depends, perhaps more than ever before, upon the standards and ideals which prevail in this profession, which can be the very embodiment of the spirit of morality, the sheet anchor of States and of all business and economic relations, or which can grovel toward the level of its prototypes in the Greek sophists, who throve in attacking anybody who attained either wealth or any kind of eminence, until all such citizens, even the best, had to employ other sophists to defend them from malicious attacks.

D. Technological schools, which, like state and land-grant universities and agricultural colleges, have for the most part come into existence within my graduate days, have all of them performed an immense service to the country. They represent applied science, or *kultur*, as contrasted with culture. The majority who attend them are intent upon a career, and this gives added zest and impels to more serious work. The fields of applied science are so vast and so varied that it is not surprising that in those institutions the humanistic element has become far less prominent. The farmer and the engineer are less interested in ancient or modern languages, literature, and history, than our students in the old private endowed institutions of the East. Even pure, as opposed to applied, science has far less devotees among students or faculty. Here we believe there is a grave danger. The forces of nature controlled by man have increased by leaps and bounds—one estimate makes this twenty-fold within the last half century—but we have done comparatively little to ensure that these immense energies will be used for the weal of mankind rather than to his detriment. It would be quite possible for a not very large group of scientists to poison or otherwise almost destroy civilization and its institutions within a short time, as another great war may yet possibly do. Only two things can safeguard us here. One is a better knowledge of human nature generally, so as to influence it effectively for the better, and the other is a great increase of moral and spiritual insight and enthusiasm.

These perils and their cures are now just beginning to be recognized by a few leaders in technology, but the tendencies of this line of higher education are still not sufficiently ameliorative of the hard and narrow impulsions of selfish egoism, still too strong in most of us. The technician is too often untouched by the humanities, too prone to take a mechanical view, and to achieve his ends by force. We believe, however, that there is reason to hope that ere long curricula in these fields will lay more stress upon studies that shed light upon the mysterious energies of human nature as it is, which have a potency comparable with that of the forces of the physical universe.

E. Far more educated young men than ever before are now going into Business. This absorbs most of the mental energy of the world to-day, but many of its laws are as unknown as were those of the celestial bodies before Copernicus. We cannot predict good or bad times, the rise or fall of securities, or of demand and supply, and often fail to anticipate the value of new discoveries or even markets, as is witnessed by the thousands of bankruptcies every year. The heart and soul of business is enterprise and honesty. If trust and confidence are gone everything in the economic world slumps. Pessimists, and often not those of the most extreme type, tell us that business methods are becoming so honeycombed with fraud that solid business men of the old school find they must modify their moral principles or lose out to their more unscrupulous competitors.

Two factors are very potent here, first, the enormous increase of advertisements, and for all show-window and other popularity agencies to attract and seduce customers to purchase it is the consumer who pays, and this charge is now heavy. The other is the multiplication of the middlemen. When the producer can sell directly to the sonsumer for one fifth or even less what he has to pay the retailer, as is the case with many commodities, prices are often boosted at an unconscionable rate.

Manufacture in a large scale which came in with the industrial revolution has brought measureless unrest and losses by turn-over, strikes, and even sabotage, so that the war between capital and labor never began to be so intense or ominous for the economic future of the world. There are those who now predict that within the life of the present generation we shall have in all civilized countries two parties, and only two, those of employers and of employees, and that principles more or less associated in the popular mind

with Bolshevism will ere long become the most challenging and perhaps war-breeding of all influences.

However all this may be, I would urge that all of you who enter any line of business not only learn it from the ground up by beginning at the bottom—if it be only hod-carrying—to know how the world looks from the point of view of the day laborer. Acute as the struggle between these forces now is, this country is more favorably situated to work out some harmonious solution between those who control the vast accumulation of wealth and those who serve its ends with their hands than any other. In all this vast field the chief need to-day is sympathy or the power to realize and to feel with those at the opposite ends of the social and industrial ladder. This is the only thing that can bring co-operation, and the man who joins strikes in an industry essential for human comfort, and he who makes an ostentatious display of wealth or uses it for selfish ends, are alike enemies of the public welfare.

For the above reasons too great stress cannot be laid in all our colleges and universities that all students, especially the growing numbers entering this field, should have a well-grounded knowledge of the principles of sociology as well as of economics to enable them to come to terms with those who advocate the most outré doctrines, because extreme opinions are always easiest and are most liable to prevail and get beyond control in just those domains of thought where science is too little advanced to perform its great function of prediction.

In every domain of life economy and frugality were never so hard yet never so necessary for the morale of business. A friend of mine of considerable means boasts that he has never taken a dollar which he did not feel he had earned by rendering an equivalent service. This ideal is hard to live up to now, but something like this alone can place the industrial world again on the solid basis which it is just now so near losing. It is perhaps in this field, too, that we can look with most hope to vocational guidance and to tests that steer young people to those lines of activity for which they have most aptitude. Thus the old precept: "Know thyself," is now more imperative and has a vaster range.

F. Many of you will teach, at least for a time, either to acquire funds for going on, or to take time for wider orientation. Here it should, above all, be realized that our whole educational system from top to bottom is well on in a great Copernican revolution. Whereas formerly the child was fitted to the school, and the young man for civilization as it

now exists, the new precept is to refit everything, curricula, methods of teaching and learning, subject matter, and even school buildings, to the nature and needs of the child; and also to refit all our institutions, industrial, civil, as well as cultural, to human nature. The Gary system, the project method, the Batavia plan, the new appeals to the play instinct, Montessori, the new student movements of many kinds, and even psychoanalysis, are phases of this great *volte face* movement, while the Dalton method almost emancipates the child from the teacher. All this is well set forth in a recent and comprehensive volume by John Adams, a veteran English educator.

Thus we are slowly having a new conception of both the nature and the nurture of both children and youth. Everywhere young people are more and more emancipated, and are taking the moulding of their lives into their own hands, as if they had lost some confidence in the older generation. Indeed it may be feared that we are in danger of losing trust in consciousness itself, which many are coming to regard as of relatively small importance in the conduct of life compared with the vast hinterland of the unconscious which goes back to our animal forbears. From this point of view there may be some truth in a claim lately put forward with great cogency by an expert that sanity itself must henceforth be regarded as an achievement which must be striven for and maintained by incessant effort. While we may agree with McDougall that the cult of eugenics is one of the great safeguards for the future of the race, we must not forget the plea of men like H. G. Wells, who insist that education, for which he thinks we should spend ten times what we are now doing, is the hope on which democratic institutions must mainly or, at least, more immediately relie. Human nature has almost infinite possibilities for good as well as for evil, and it is the educator who has most to do with determining in which direction these possibilities shall become realities.

Thus, if you leave teaching later, as many if not most of you will do, keep up a very active interest in the schools as an ever more essential part of good citizenship. We must always remember that in the young interest is the very best and often the first noticeable sign of ability, and also the surest harbinger of success.

Finally, let me repeat that there were never so many alternative choices, so that the Greek apologue of Hercules at the crossroads, the text of so many exhortations to the young, is to-day inadequate. Youth is rather like the center of a great circle with many radii, and as one advances along any

of these there are incessant other choices. It would be a great gain to the world, too, if graduates would at the outset adopt the principle in all these decisions of taking the line where they can do instead of, as is too common, where they can get the most good. To-day, while there is danger on the one hand of simply following the trend of current opinion and acting as others do, there is the opposite danger of hyper-individuation, and perhaps even intolerance toward those who have gone other ways. Hence the largest spirit of magnanimity becomes necessary. Do not forget that there are now hundreds, if not thousands of new eminences that it is possible to attain, just as, on the other hand, there is unprecedented danger of falling into ready-made ruts so deep that it is difficult to get or even to see out of them.

Keep alive the memory of your academic freedom, leisure, and enthusiasm. Coming back to Commencement will rejuvenate you as well as hearten your Alma Mater. In fine, you are going out into a new world— a world that is just in the process of rebirth, with more possibilities for good and bad than were open to the youth of any generation in the past. How we of my generation, who can only hearten you with our *morituri salutamus* wish we could live to enter it as you will. Never has there been such a glorious time in which to be young, for there is a deep kinship between the call of the new age and the call of youth.

A STUDY OF ADOLESCENT FRIENDSHIPS

By Paul E. Williams, Boys' School, Cleveland

A group of eighty-four boys of adolescent age from Boys' School, Cleveland (a school for delinquent boys), were questioned as to their choice of friends, and as to their reactions in case of a moral lapse in these chosen friends, the idea being to attempt to determine whether unconsciously they chose friends of their own physical or mental age; to ascertain what unconscious plan these boys (all of whom probably are cases of mental or moral instability themselves) used in choosing friends; to find out the attitude of the lads toward informing or "telling on" these friends; and to discover how cowardice or "showing yellow" would affect their friendships.

Special care was taken to impress on the boys that the answers given in the questionnaire would in no way affect them in grade or standing,—with a view to getting a real expression of opinion from them. It is believed that this has been largely accomplished. Each boy gave his own name and age and then gave the names and ages of two boys from Boys' School whom he would consider his friends. These ages were checked up and corrected. The mental ages were taken from the individual and group mental tests given by the Department of Attendance Psychological Clinic. Tabulation was made of this data by totals of those chosen, of the same, greater or less chronological and mental age. The grades answering the questions were: 7B, 7A, 8B, 8A, and 9B. The number of boys answering was 84. The range in chronological age was from 12 to 17 years; the range in mental age was from 9 to 15 years and 6 months.

Table I gives the number of chums chosen according to equal, greater, and less chronological and mental age.

Table I

Ages of Chums Chosen

(Each boy choosing two chums)

Chronological

Same (range of 6 months above and below)	68
Greater	49
Less	51

Mental

Same (range of six months above and below)	60
Greater	60
Less	48

A careful study of the individual figures from which these totals were made, reveals that choices were of a rather wide range throughout, although not so wide as the totals might indicate. "Same" in both cases means almost identical, and choices in both "Greater" and "Less" fall in the main (about 75%) within a range of a year above or below. Choices as to grade show that very little attention was paid to the grade to which a given boy belonged, especially among the 7B, 7A, 8B, and 8A groups.

Next they were asked to give reasons for liking each of their friends. The answers (Table II) show certain rather marked characteristics—choices being chiefly because the lads were "full of fun," "fair and square," "friendly," "a good sport," or "a sticker."

TABLE II

Reasons for liking those named

(Each boy describing two chums)

Full of fun	34
Fair and square	24
Friendly	19
Has done things for me	15
Good sport	13
Athlete	12
Sticks with you	11
Lives near	9
Quiet	8
Good boy	6
Help in trouble	6
Miscellaneous	11

They were then told to name the qualities (the meaning of this word was clearly explained) they looked for in a chum (Table III). Here "honesty," "a sticker," "brave," and "fair and square" were at the top of the list.

TABLE III

Qualities desired in a chum—he must be:	
Honest	12
A sticker	11
Brave	9
Fair and square	9
An athlete	7
Good	6
Healthy and clean	6

Kind and courteous	6
Cheerful and full of fun	5
A good sport	3
Silent	2
Miscellaneous	8

Following this they were asked two questions which might be considered as "moral" in regard to these chosen friends. The first was: "If either of the above cheated or stole, would you stick by him?" They answered rather decisively (Table IV) that they would, and showed that it would make little difference to them what he did. They indicated plainly, too, their own attitude on the subject of cheating and stealing.

TABLE IV

A. Number of boys who would still chum with friends if they cheated or stole—58.

Reasons

He's my friend	19
If he wouldn't do it again	11
I'd tell him not to do it	7
I like crooked friends	4
I'm no angel myself	4
If nobody knew it	3
Miscellaneous	10

B. Number of boys who would not chum with friends if they cheated or stole—26

Reasons

Get me in wrong	6
I hate a thief	5
Did it once—will again	3
He'd "learn" me the trade	3
Miscellaneous	9

With this they were asked: "Would you tell on him?" Here they answered almost unanimously (Table V) "No"—because "he's my friend," "it's none of my business" and "I'm no snitcher."

TABLE V

A. Number who would tell on friend—10

(If friend cheated or stole)

Reasons

He might get better	3
Might get me into trouble	2
He deserves it	1
It isn't right to cheat or steal	1
It's right to tell	1
Miscellaneous	2

B. Number who would not tell on friend—74

Reasons

He's my friend	13
He may tell on me	13
It's none of my business	12
I'm no snitcher	8
I'd give him another chance	8
He wouldn't do it again	5
It would do no good	4
I'd try to change him	2
Miscellaneous	9

The final question was: "If he showed himself to be a coward, would you stick by him?" To this they answered about half and half "Yes," and "No," with a slight leaning toward the positive. If they said "Yes," they signified they wanted to help him become brave. If they said "No," it was because they hated a coward.

TABLE VI

A. Number who would stick if chum showed cowardice—45

Reasons

So I could teach him not to be a coward	15
He's my friend	7
Stick together and we might win	5
If he was weak	4
Everybody is kind of a coward	3
It's no crime to be a coward	2
Miscellaneous	9

B. Number who would not stick—39

Reasons

I hate a coward	13
You can't depend on him	7
Yellow	4
A coward is sneaky	4
Once a coward always a coward	3
No nerve	3
Miscellaneous	5

CONCLUSIONS

Probably the conclusions drawn from a study of the friendships of these lads would hold approximately for a small cross-section of any city. These boys certainly have friendships which are noticeably strong for their age, and they perhaps "stick" closer than the average. From the data found, we may say that:

1. These boys tend to choose chums of about the same chronological age.

2. They choose chums of about the same mental age, with a slight tendency to choose those of greater mental age.

According to their own testimony:

3. They choose friends because of fairness, fun, sportsmanship, and friendliness, with athletic ability following close behind.

4. They would stick by a friend through thick and thin—no matter what he did.

5. They would almost never tell on him in case he got into trouble.

6. If he showed himself to be a coward they would either stick by him to help him win out, or would drop him because they hate cowardice.

THE CAREERS OF THE COLLEGE STUDENT[1]

By Donald A. Laird[2],
Yale University

I

Selecting a life work undoubtedly appears to be one of the most difficult as well as one of the most important tasks in life. A survey of popular and contemporary writing on vocational selection and guidance would indicate that only a few persons have decided early in life upon a definite calling. These few, so the books say, have attained what may be considered successful careers. The great majority, however, seem not to have considered this selection, or, at least, did not begin to think seriously of the problem until they were ready to leave school and selecting some line of work faced them in a very urgent form.

On the other hand, the criticism is commonly, and no doubt justly, made that many vocational misfits are due to a premature selection of a life work, without knowing oneself or the life work anticipated. It is a wise man who changeth his mind, or, in this case, his vocational choice. His contemporaries are the man-made ministers and the parent-made physicians. If we are to believe this side of the story, it is the persons who have consistently stuck to their parents' choice who are the disgruntled misfits, the broken spirited, the discouraged, the rebellious, and discontented in life.

Without entering into the moral or inspirational bearings of vocational guidance and selection, it *is* desirable to have some understanding of the factors, both apparently conscious and unconscious, that enter into the making of such a choice. Whether this choice be wisely made or no is another question. What leads persons to make the selections they do in itself is of much psychological interest. No one can justly accuse us of being premature in assuming that the college freshman should have a notion more than nebulous regarding the life work he intends to follow. True enough he may change from that choice as his college years advance, as, indeed, the second part of the survey we are reporting shows. But by time college is reached the young man or woman should

[1]As from the University of Wyoming.

[2]Tabulated with the assistance of Mrs. Edith Lander.

undoubtedly have some rather definite life work in mind. Especially is this true since the colleges have broadened their scope and have many courses listed in their catalogues that are pre-eminently of practical value in certain careers rather than of any apparent cultural value.

The modern liberal arts student represents, par excellence, those students who have as yet been unable to select between the various attractive callings of adult life. Their liberal arts work offers them a four year respite during which the decision may be held off. In the spring of their senior year very often the decision is precipitated by a glowing letter from a teachers' agency. Their courses in arts and sciences offer them the most graceful excuse for loafing and perennially postponing their choice of a career.

At that, however, many students who have not definitely set their hearts and their head in some vocational direction do have unquestionable leanings. The psychological factors which seem to be back of these selections and inclinations will be reported, in part, in this article.

A survey was made of the careers chosen by the freshmen and the seniors of the University of Wyoming. The freshmen were asked what career, if any, they were expecting to enter; then *why* they thought they had selected that calling for their life work. The results that were obtained under the "why" section are so homogeneous that it may be best to state at the outset that not the least suggestion was given them regarding possible reasons for a selection. The fact that so few differing reasons were given does not reflect leading questions but rather an agreement among college freshmen in their way of thinking about careers. It is just another instance of human nature operating in fairly uniform ways.

There were 187 university freshmen who contributed their choice and reasons for the choice to this report. The vocations selected by this group of representative young people are listed in Table I. The reasons for selecting this occupation as given by the students are listed under three heads. Some were going into their life work because of the opportunities it offered for making a living above the average, because of the opportunities for advancement with the sky as the limit. These are the ones who are listed as having chosen their particular vocation because of the *future* offered them. Some students had difficulty in thinking of any reason other than just plain *interest* that led them to select a life work. These are the ones who are going into engineering because they have always liked working around machinery and making things. These are the ones who are going into social service

because, in the words of one girl, "I can run other people's business and have always been interested in this work." The last clause was apparently added as an after thought; the first part of the quotation probably contains the essence of the matter in this particular instance.

The group who were entering their life work because of the opportunities for being of *service* to mankind show that idealism is not yet dead among college freshmen. Here we have the lad who wants to be a ranger because he can be of service to the people in protecting their forests, guiding tourists to places of exquisite beauty, and protecting the animals of the forest from the depredations of the poacher. In this same group we also find the co-ed who has selected home-making for quite similar reasons. She looks upon it as Nature's highest good to be of service to her husband and children. And so on they go. Whether or not these are the real reasons is beside the point. They at least show the trend of the conscious thinking of the students. And, as far as that is concerned, these are quite probably as near the real reason

TABLE I

CAREER CHOSEN	REASON GIVEN FOR SELECTION		
	FUTURE	INTEREST	SERVICE
Acting		1	
Art		5	2
Aviation		1	
Bacteriology	1		
Cartoonist	1		
Commerce	14	2	2
Chemist	1	2	
Costume designing			1
Engineering	17	13	1
Farming (and ranching)	2	3	1
Forestry service		2	1
Home making		1	2
Interior decoration	1		
Law	10	2	
Music	1	1	
Ministry			1
Metallurgy	1		
Nursing			3
Public speaker		1	1
Social Service		1	3
Translator	1		
Teaching	2	19	22
Writing	2	4	2
Totals	54	58	42

as the reasons given for attending church, or not attending. So-called reasons are oftentimes excuses rather than reasons, but they are no less interesting psychologically for this characteristic.

Data from the same group, but not included in the above table because it did not permit of conformity to the classification given, was as follows: One chose banking for the social prestige it gave; one chose a military career because it was somewhat hereditary in his family, and one other selected a commercial career for the same reason. Two men selected careers that gave them independence from the commands of others, these were farming and ranching. Only 13 out of the 187 had not yet decided what they were going to follow. In addition to these, five thought they might teach and six others said they were going to teach from necessity; it gave them about the best opportunity to step into a well-paid position without the necessity of spending years in preparation.

The reasons given for the selection of a particular career balance fairly well; there are more members of this typical group of college freshmen, however, who maintain that they have selected their life work because of interest than because they hope to be of some service to suffering mankind. It is questionable if the differences in reasons given are great enough to receive more than passing notice in the group as a whole.

Different careers unmistakably attract for different reasons. This is notably so in the case of the legal profession. The aspiring Blackstonians seem to be attracted overwhelmingly by the future that this profession holds before them. The same is true for commerce and business. Engineering has a bimodal representation between future and interest whereas those who are entering the law or commerce avow it is the future rather than any interest that draws them on.

Careers that bear the earmarks of feminity attract their prospects by the call to service or interest. This is in contrast with what might be called the masculine careers mentioned in the paragraph above. Social service, teaching, nursing, and home-making lead in selection due to service and interest rather than any wordly glory such as success or a future.

It is noteworthy that among the 154 students tabulated in Table I only twenty-three distinct careers had been selected. It is also notable that among the larger group of 187 students there were only 33 whose reasons for the choice of their career could not unequivocally be listed under any of the three large reasons,—future, interest, or service.

Four of the careers listed had been selected by over two-thirds of the students. These are as follows:

Engineering	31
Commerce	18
Law	12
Teaching	43

Women are represented in only two of these groups, teaching and one woman in commerce.

II

How does intelligence influence these selections? There are some who would say that quite probably those students who were choosing their career from apparently idealistic reasons would be found to be inferior in intelligence. The idealism, the craving for service,—so the argument runs,—is sort of an unconscious admission that they do not have the intelligence to be successful and gain much of a future. What truth there may be in this point of view will be apparent after we have presented the intelligence scores for each of the groups.

Intelligence ratings were available for 142 of the 154 students whose occupational choices and the reasons for the choices were presented in Table I. The next few sections of this report is limited to the 142 students who had taken the intelligence test. The test used for this purpose was the Thorndike Intelligence Test for High School Graduates. This test requires almost three hours to give. The results are given in a score. No attempt is made to translate, as it were, these scores into a mental age or an intelligence quotient. The raw scores made on this long intelligence test have been used.

How this group stands in intelligence is shown in the data given in Table II. It will be noted that there is but little difference between the men and women we are studying as a whole in intelligence. As soon, however, as we begin sectioning them according to the reasons given for the selection of an occupation very marked and significant group differences appear.

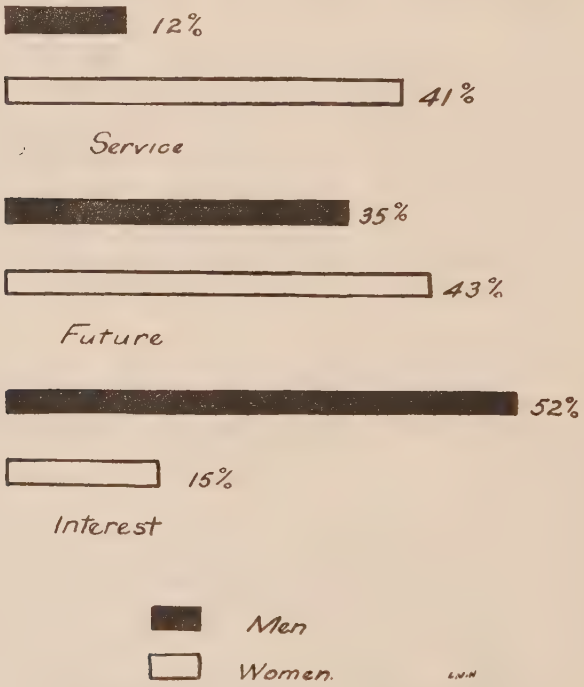
This stands out plainly in the distribution of the intelligence scores of the men and women who attributed their choice of a career to the future that it promised them. The median score for those students selecting careers because of the chance for success falls in the same score interval as the entire group of students. At the other extremes we find that the two men with the lowest intelligence score as well as the one man with the highest score did not select their careers on the

basis of future success. The range is still smaller in the case of the women where the two lowest scoring as well as the three highest scoring are not represented in this smaller group.

The future a career offers appeals to college men three times as frequently as it does to college women.

When occupations or careers are selected because of a personal interest in the type of work selected we find this sex difference evening up. We are now dealing with a group that falls noticeably below the average in intelligence. At the same time, however, the man and woman making the highest score in the entire class are in this group, as is also the lowest scoring woman.

The group that chose their careers apparently on the basis of idealistic reasons which center around service show up still greater and more interesting differences. The sex ratio is now reversed to what was found in the appeal of the future; it is now three men to one woman. This is only one of the interesting differences. The women who have selected their



This shows how vocational choices due to interest, future, and service appear in the two sexes

career for this reason are on the average very much above the median of all the freshman women in intelligence, while the average for the men in this same group is even more below that of all the freshman men studied.

Further study was made of the relationship between intelligence standing and the reasons given for the choice of a career in two occupations. This is a test, in a way, of the findings which have been presented so far in the report. The two occupations selected were teaching and engineering. These two are represented by the greatest frequency and are chosen by different sexes.

The teachers come first in discussion. In Table III is shown the relative frequency of the choice of the career of the teacher by each of the three reasons, namely: service, interest, and future. Of first importance is the fact that almost all of the women had selected teaching either on account of service or interest. Only two out of the thirty-seven selected this as a career because of the future it held. This may be a reflection upon the general status of teaching or upon the motives that lead young women to select this as a career. That may be decided to suit individual tastes.

TABLE II

INTELLIGENCE SCORE	CAREER SELECTED BECAUSE OF:					
	FUTURE		INTEREST		SERVICE	
	Men	Women	Men	Women	Men	Women
100–104						
95–99			4.0	3.2		
90–94	2.7			6.4		
85–89	2.7	9.1			11.1	3.4
80–84	5.4		4.0			6.8
75–79	13.3	9.1	4.0	9.6	11.1	10.2
70–74	18.9		12.0	9.6	11.1	17.0
65–69	13.3	27.2	16.0	6.4	11.1	20.4
60–64	5.4	27.2	20.0	9.6		10.2
55–59	8.1	9.1	12.0	19.4	33.3	13.6
50–54	8.1	9.1	8.0	12.8	11.1	6.8
45–49	8.1		8.0	12.8		6.8
40–44	8.1	9.1		6.4		
35–39	5.4		8.0	3.2		3.4
30–34			4.0			
25–29					11.1	

When we turn to the permutations of intelligence and reasons, however, the facts will be able to force decisions for us. The women who selected teaching because of the opportunity for service have the highest average intelligence

of the three groups under comparison. The two selecting this career because of its future were the lowest. Midway between these, but nearer the service group, is the interest group. The highest score for the future group falls in the same interval as the lowest intelligence score for the service group. The service group is fairly compact, being closely grouped about the median.

This one occupational choice—teaching, substantiates what was found in the earlier sections regarding the factors of intelligence and apparent reasons in the choice of a career.

The men who had selected engineering as their life work are now to receive the same treatment that the embryo teachers have just undergone. In Table III the ramifications of

TABLE III

Why College Freshmen Chose to Become Teachers or Engineers

Intelligence Score	Teachers Because of			Engineers Because of		
	service	interest	future	service	interest	future
100–104						
95–99		5.5				
90–94		5.5				5.5
85–89						
80–84	5.8				8.3	5.5
75–79	11.6	11.0			8.3	22.0
70–74	23.2	5.5			8.3	22.0
65–69	23.2	5.5			8.3	11.0
60–64	11.6	11.0			16.6	5.5
55–59	17.4	22.0		100.00	16.6	22.0
50–54	5.8	11.0	50.0		8.3	5.5
45–49		16.5			8.3	
40–44		5.5	50.0			
35–39					8.3	
30–34					8.3	
25–29						

intelligence in the three choice groups is shown. The order in frequency of reasons is the reverse of that found in the case of the teachers. Future appears with the greatest frequency and also has the highest intelligence average. The service group ranks lowest both in intelligence and frequency of choices for this reason. Interest as a reason for the selection of engineering ranks midway between future and service, both in intelligence scores and frequency as a basis prompting this choice. The highest and lowest scoring men among these freshman studied did not select engineering for their life work. Slightly more than one-half of the freshman men, however, have chosen engineering.

Before turning our attentions to another section it may be well to summarize what we have so far found in the case of college freshmen. Women select their careers from idealistic reasons three times as frequently as men, while men select their careers three times as frequently from practical reasons connected with providing for a successful future. The young men who selected their careers from practical motives tended to rank highest in intelligence while those who chose their life work from idealistic reasons tended to be the lowest in the entire class. With the young women exactly the reverse relationship was found to exist. This was well shown by the two occupations selected with the greatest frequency,—teaching on the part of the women and engineering by the men.

There was not a great variation in the vocations selected by these people. Quite a few of the vocations, which, at the same time, were selected by only a few of the students, are ones in which it is difficult to see any constructive aid being rendered by the orthodox college courses.

These students appear to be rather altruistic in so far as choosing a career because of the service that can be rendered is a fair indicator. Statistically expressed it might be said that the average college freshman, so far as this group is representative of the long run of freshmen, is about one-third idealistic. There is a very marked sex difference in this respect. The women tend to be about one-half idealistic while the men are only about one-eighth idealistic.

II

We have made a short study of the careers chosen by college freshmen and the avowed reasons for this choice. Are these young people going to cling persistently to the career of their freshman choice? This will be answered when we now present data from 21 seniors at the same school. Seven of these, or one-third, have changed the vocational choice that they had made as freshmen. One is undecided at present, although as a freshman she was definitely decided as to the career she wanted to follow. Two who were undecided at first have, by time their senior year is reached, made up their minds regarding their selection of a life-work.

The following table shows the distribution of these seniors in respect to changing, reasons for choices, and careers.

The apparent idealism of the college freshman has practically disappeared in the group of seniors when the choice of a career is considered. Every third freshman has manifest idealistic motives back of his vocational choice, only two

TABLE IV

Present vocational choices of the group of seniors

CAREER	CHOICE NOT CHANGED			CHOICE CHANGED			UNDECIDED AS FRESHMAN		
	INTEREST	FUTURE	SERVICE	INTEREST	FUTURE	SERVICE	INTEREST	FUTURE	SERVICE
Teaching	2	1	0	0	1	0	0	1	0
Journalism	1	0	0	1	0	0	0	0	0
Law student	0	1	0	1	1	0	0	0	0
Medical student	1	0	0	0	0	0	0	0	0
Engineering	1	3	0	0	1	0	0	0	0
Commerce	0	0	0	2	0	0	0	0	0
Librarian	0	0	0	0	0	0	0	1	0
Totals	5	5	0	4	3	0	0	2	0

of this group of seniors maintained such motives. These two were among the few that had not changed their vocational choice made as freshmen.

A comparison of the group of this senior class who intend to enter into the work of teaching after graduation is interesting when compared with the freshmen who were anticipating teaching. Six of these seniors are in this group. Two-thirds of these have given the future of this profession as their reason for entering it. One other is entering into this work because of interest and another because of the opportunities for service.

The preparation that these students have received for teaching is illuminating. With only one exception they all had planned on becoming teachers when they were freshmen. Their major and minor subjects, however, are as follows:

Initials	*Major subject*	*Minor Subject*
A. S.	Languages	History
L. T.	English	French; Education
M. L.	Animal husbandry	Agronomy; Education
R. H.	English	French; Spanish
A. J.	Spanish	Latin
B. F.	Botany	English

Although these students entered their college work with the intention of teaching, we find not a single one of them

selected education as a major, and the same subject appears only twice as a second minor. Of course they have had to take a few scattered courses prescribed by the State Boards in order to obtain a teaching certificate, but the fact remains that none of them have specialized in training for the work they expect to follow.

The average non-professional college student does not take his vocation especially seriously until his senior year is reached. Perhaps this is one of the reasons for the apparent lack of vocational idealism among the seniors. They are confronted with the bare necessity of making a living respectable and remunerative enough to become the dignity of a college graduate. The changes in a choice that are made during the four year college course are rarely made by weighing all things in the balance. A harsh or uninteresting instructor, courses too difficult for their intelligence, or a circular letter from a teachers' agency may be all that is needed to bring about a change in the choice of a career

Practically all the students have given some consideration to their life work. In the case of the underclassmen, however, this does not occupy as important a place as making a fraternity does; in the case of the upper classmen it may cause many sleepless nights. The lack of stability of their ideals and choices is well reflected in the changing of choices by fully a third of the students by the time they have reached senior dignity. That some of them are largely victims of circumstances is shown by the fact that one of our seniors who would have to work following graduation, was still undecided as to what particular line of work she would prefer.

This is quite probably nothing serious. Their full quota will be found in "Who's Who" in years to come, they will be just as substantial citizens as though they had begun their preparation for a career in the kindergarten, and, barring abnormalities, they will enjoy life as much, if not more, than the other fellow.

HOW THE HIGH SCHOOL STUDENT RESPONDS TO DIFFERENT INCENTIVES TO WORK[1]

By Donald A. Laird,[2]
Yale University

Training in the methods of teaching high school subjects does not always make a successful teacher of them. Intimate and advanced knowledge of the subjects, also, does not invariably produce the ultra successful teacher.

One other factor usually has to be added to these two to produce a successful high school teacher. This factor is the ability of the teacher to secure the co-operation and whole-hearted work of the high school boy or girl.

How to accomplish this may be settled from the arm chair, by a study of anecdotes, or by getting the actual responses of the students to various methods of trying to secure their co-operation and full measure of work. This is a report of a study of different incentives that are in common use by the latter method.

Ninety-two students in educational psychology reported in detail their actual responses to different incentives used by their high school teachers. These subjects were as unbiased as one would expect to find. They had all had four years high school work and were either sophomores or freshmen in a state university. We were trying to prove nothing. We simply wanted to find out which incentives really worked out with the best tesults. They were asked questions which will be made plain as the results are gradually unfolded.

In each instance, however, they were told to think back to the times in their high school days when various incentives had been used. They were not to use their imagination in constructing instances, or use their own opinions in recording how they responded. They were to act as impartial observers of their own responses at the time as a high school student. The emotional intenseness of some of the incidents has faded away by time they reached college maturity and more sane judgments were given than if they had been asked upon the spot. In each instance they were to go back in their memory

[1]As from the University of Wyoming.

[2]Tabulated with assistance of Miss Mary McCarthy, Miss Helen Egan, and Miss Neva Crain, students in Educational Psychology.

TABLE I.

Summarized data of frequency of different incentives and the responses of the high school student to these motives

	I Reprimands before others			II Reprimands in private			III Sarcasm before others			IV Sarcasm in private			V Public ridicule			VI Private ridicule			VII Low grades			VIII Extra work			IX Conferences with parents			XI Parents urging good work			XII Friendly conferences			XIII Public commendation			XIV Commendation to parents			XV Excused from work			XVI In love		
	M*	W*	T*	M	W	T	M	W	T	M	W	T	M	W	T	M	W	T	M	W	T	M	W	T	M	W	T	M	W	T	M	W	T	M	W	T	M	W	T	M	W	T	M	W	T
Per cent. experiencing	44.7	51.9	48.4	28.9	31.5	30.2	34.2	31.5	32.8	15.8	12.9	14.3	34.2	25.7	29.9	18.4	7.4	12.9	34.2	48.1	41.1	44.7	29.6	37.1	15.7	12.9	14.3	50.0	48.1	49.0	42.1	44.4	43.2	36.8	55.5	46.1	36.8	38.8	37.8	44.7	57.4	51.0	50.0	37.0	46.
Per cent. working better afterward	23.5	28.5	26.0	27.2	70.5	48.8	7.6	11.7	9.6	0.0	42.8	21.4	23.0	7.9	15.4	0.0	25.0	12.5	0.0	34.6	17.3	11.7	18.7	15.2	33.3	50.0	41.6	79.9	88.4	84.2	93.6	75.0	84.3	78.6	73.3	70.9	21.4	71.4	46.4	58.8	74.2	66.5	21.1	15.0	18.
Per cent. working the same afterward	41.2	39.2	40.2	54.5	23.5	39.0	38.4	5.8	22.1	83.3	14.2	48.7	46.1	50.0	48.0	85.7	50.0	67.8	38.4	26.9	32.6	58.8	62.5	60.6	33.3	25.0	29.1	21.0	11.5	16.2	6.3	25.0	15.7	21.4	26.7	24.0	71.4	25.8	48.6	35.3	25.8	30.5	15.7	50.0	32.
Per cent. working worse afterward	35.3	32.2	33.7	18.2	5.8	12.0	53.8	82.4	68.1	16.6	42.8	29.7	30.8	42.0	36.4	14.3	25.0	19.6	61.6	38.4	50.0	29.4	18.7	24.0	33.3	25.0	29.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.1	0.0	3.6	5.8	0.0	2.9	63.1	35.0	49.
Per cent. taking it seriously	41.2	60.3	50.7	36.3	70.5	53.4	69.2	71.0	70.1	66.6	57.0	61.8	30.8	71.4	51.1	42.8	25.0	33.9	53.8	80.7	67.2	47.1	25.0	36.0	66.6	50.0	58.3				81.2	87.4	84.3	64.3	70.0	67.6	35.7	66.6	51.1						
With reference to others																																													
Per cent. working better	42.0	43.3	42.7				18.7	33.3	26.0				29.1	37.0	33.1				41.1	31.0	36.0	23.5	8.4	15.9										50.0	51.7	50.8									
Per cent. working the same	47.5	43.3	45.4				62.5	40.0	51.2				45.8	45.6	45.7				11.4	31.1	21.2	64.8	74.1	69.4										50.0	48.3	49.1									
Per cent. working worse	10.5	13.3	11.9				18.7	26.6	22.6				25.0	17.3	21.2				47.1	38.0	42.5	11.7	18.5	15.1																					

*Men, Women, Total

and recall if they worked the same, better, or worse after each incident to be described immediately.

Furthermore, reprimands for misbehavior were not to be considered. Only reprimands relating to poor class work were to be recorded. So with the other items; only those relating to class work were to be recalled. Their responses to these situations, in turn, were to be limited to the way they took up their class work. Their general badness was not to be considered, only their work as a student and not as a bad boy or girl was to be recalled.

1. *Reprimands before other students.* This includes reprimands for any cause, real or fancied, in front of other students, either in class, laboratory groups, or groups congregated in hallways. The reprimand, however, was always with reference to scholastic work. The findings on this topic are given in the first section of the Table.

Practically half of the students have been reprimanded under the conditions stated in high school sufficiently to have a distinct recollection of it several years later. The women either have been so reprimanded more than the men, or else their impressions have been more lasting. That this latter may be the explanation is indicated by the fact that two per cent. more of the women students than the men who have been publicly reprimanded in high school took the reprimand seriously, "so much so that they 'mooned' over it for several days, kept thinking about it in spite of trying to forget it, and it kept popping into thoughts at odd and unexpected moments." The tendency on the whole was not for the students to work better following the reprimand. The smallest per cent. of the students responded in this way. The majority of them worked the same, while about a third of them actually worked worse than before the reprimand.

The women were spurred on by the reprimands to work better in more instances than the men, who, in turn, were incited in more instances to poorer work as the result of the reprimands.

The widespread effect of public censure is noticeable in the fact that one out of every ten work worse for an instructor in high school when he *reprimands others* publicly. The whole class, however, is stimulated to work better as the result of the censure of an individual in 42.7 per cent. of the cases while the individual himself who is censured is stimulated to better work in only 26.0 per cent. of the cases. It may be a case of the sacrifice of the work of the individual for better group work.

Again a slight sex difference in the response to situations

such as these is noticeable. The women go to the extremes more than the men of the group. This may be a reflection of the proposition that the female has greater human sympathies than the male.

Considering the per cent. of the students who fall into the "same" and "worse" groups and the large per cent. who took the reprimands seriously, it is doubtful if public reprimands of students are justified in an attempt to secure more or better work from high school students. There are no data available relating to the uses of public censure or reprimands in keeping a group of adolescent students "under control." Even in instances such as this, however, the writer is of the opinion that the reprimanding is an evidence of poor control rather than a warranted procedure.

2. *Reprimands made in private.* Here we have essentially the same situation as outlined above but with a very important change. The social factor is largely reduced in this situation. With what results the data in the second division of the Table show.

A private reprimand brings results much different from the products of a public reprimand. Almost twice as large a per cent. of the high school students were spurred on to do better work as were similarly stimulated by a public reprimand. Only about one-third as many worked worse after this private reprimand. The per cent. of students unaffected remains about the same. The private reprimand was taken seriously by about the same per cent. that took the public reprimand seriously. Greater sex differences appear, however. The girls took the public reprimand seriously in about 20 per cent. more cases than the boys. The private reprimand shows a sex difference of about 35 per cent.

Other sex differences are evident in the data. Seventy per cent. of the girls were stimulated to better work, while only 27 per cent. of the boys were so stimulated. At the other extreme we find roughly 6 per cent. of the women doing worse work and 18 per cent. of the men doing worse work after a private reprimand.

Although private reprimands may not be at the acme of desirability in securing better work or obedience from high school students, a comparison of the two tables given shows that private reprimands are much better than public reprimands. The teacher who feels that he must reprimand his high school students had better confine his reprimands to personal conferences. At the same time we find that half of the students studied had been victims of public reprimands

while less than a third had been subjected to private reprimands.

3. Sarcasm before other students. The situation here is much the same as that outlined under I. The only difference is that in the present data only instances of sarcastic remarks have been recorded. Summarized data are presented for this topic in the third section of the Table.

A comparison of public reprimands and public sarcasm shows the latter to be the more *in*effective (neither one is at all effective) in the attempt to stimulate the students to work harder. The women seem to be more affected by this either for better or for worse, there being only 5.8 per cent. who work the same after the public sarcasm, but, and this is very important, 82 per cent. of them work worse following such a "stimulus" to increased working activities. The men in the main are either unaffected or do poorer work.

Sarcasm is taken much more seriously by the students than are reprimands.

Sarcasm directed towards others does not have the stimulating effect of reprimands similiarly used. In the case of sarcasm about three-fourths of the students do either the same or worse work. Again the women have a greater per centage of their sex doing worse work than is the case with the men.

If our findings warranted us in accepting the belief that reprimands of a public nature should *not* be used in the attempt to secure more or better work from high school pupils, then the data just cited warrant us in accepting the belief that sarcasm should *never* be used publicly. About one-third of the students have been victims of public sarcasm in high school.

4. Sarcasm used in private. This occurs with about half the frequency of public sarcasm, but has much different results, as the data given in the Table show.

These data plainly indicate that private sarcasm does not have the undesirable results that public sarcasm does. At the same time it is still noticeably below the effective results of private reprimands in securing more or better work. Comparing these two we find that twice as many do better work with reprimands and half as many worse work with reprimands.

5. Public ridicule. This is distinct from reprimands and sarcasm although it is a close ally of both. Its influences upon the work of the students is shown in the data in Division V.

The effects of public ridicule as a motivating agent are, like ridicule itself, closely allied to reprimands and sarcasm. Like these it is not paying in increased work. Like these,

too, its social effects are greatest, that is, it is most effective in a desirable way when others are ridiculed. Men react with better work to ridicule more than do women.

6. Private ridicule. The data for this are given in Division VI.

Private ridicule has the advantage over public ridicule in a reduction of the per cent. who work worse, otherwise there is little advantage gained. In the case of the two negative motives which we have taken up immediately preceding the private administration of the incentive was more efficacious than the public administration of the same device. Ridicule, however, shows the least difference between public and private of the three. Its results are as undesirable as the results obtained by the use, whether intentional or just "by nature," of sarcasm and reprimands.

7. Low grades as a stimulus. It is not uncommon practice for a high school teacher to give a student a low grade because the instructor feels that a poor mark may serve as a stimulus to better work on the part of the student. Just how students *do* react to a low grade as a stimulus is interesting and disillusioning. The students were asked to think back to the times in high school when they were given lower grades than they sincerely believed they deserved, not lower than they would liked to have been given, but lower than they really felt they merited. They responded to this situation as shown in the Table, Division VII.

It is apparent that grades such as are under discussion are not at all a rarity. It is significant, also, that the women report more cases of receiving lower grades than they thought they deserved than do the men. This may be in part due, if not largely due, to the generally assumed seriousness of the female as a student. This is reflected in the per cent. who took the poor grades seriously, the ratio here being 53.8 per cent. of the men to 80.7 per cent. of the women. This same sex difference is borne out in the way the sexes responded to low grades as a stimulus; none of the men worked better afterward but about one-third of the women improved their work intentionally.

As an incentive the proceduce under discussion is less effective than public reprimands and more effective than public sarcasm. It is also less effective than either sarcasm or reprimands used in private.

A glance at the last three items in the data under consideration shows that students as a whole tend to work harder for an instructor who is known to reward poor work with even poorer grades, regardless of whether the student who works

harder has received low grades or not. This improvement is greater than that noted under the similar heads in sarcasm but less than in the case of reprimands.

8. Extra work as an incentive. This is closely related to low grades. In securing the data we limited the extra work to be thought of to that given apparently out of disciplinary motives and not that assigned because of special ability and the capacity to carry more work than the average.

This is a rather commonly used "incentive." More than one-third of all the students can recall its use, which also seems to have been more common among the high school boys. On the whole this method of stimulation has neutral results, there being 60.6 per cent. of the students who reacted by working the same. It has its undesirable effects in that more students worked worse than worked better in reacting to this situation. For an instructor who commonly assigns extra work as an incentive the students react in general by sameness in their work while these who work better are offset by an equally small number who work worse. There are interesting sex differences to be made out from an examination of these data.

9. Conferences with parents. Parents are sometimes conferred with by principals or teachers relative to the work of their progeny. In collecting the data we included under the head of conferences phone calls, letters, and all methods of communicating to the parents that their child was doing *poor* work in high school. This is not a very common occurrence as the data in Division IX show.

This method seems to have desirable results with the girls since half of them work better afterward. The men are equally divided among all three groups, but two-thirds of them take the conferences seriously. The reactions of the men lower the average so that slightly less than half of the students were stimulated to better work. On the whole, however, so far as securing better work is concerned, this is an effective procedure, and one that is little used.

10. Corporal punishment. This weapon of the old schoolmaster and symptom of sadism is still found in high schools; true enough, it is not common. Among the subjects we found seven instances where it had been applied as a means of provoking a more serious interest in school work. These seven instances were not occasioned by poor conduct, rather were they the result of poor work. The rod was applied as an incentive to greater efforts along scholastic lines.

The instances are too small to warrant any close comparison of the sexes or other groups. It is important, nevertheless, that none of the students worked better as a result of the

corporal punishment. The one woman worked worse and all the men the same.

11. Parents attitudes as incentives. It may very likely be that conferences with the parents relative to poor work by their children may be effective, not because of the teacher or the principal, but rather because of the parents' attitude toward their children's work. In other words it is the parents rather than the conference that is the incentive.

The data in Division XI reveal what has been found to be so far in our study the most effective incentive. In frequency of occurrence, however, this is scarcely greater than some of the other incentives we have studied which have pernicious rather than desirable effects. The problem of high school motivation for serious work among the students could apparently be well approached through an indirect stimulation of parent-teachers activities.

This ends the presentation of the data relative to what have been called the negative incentives by some writers. In the concluding portions of this report data will be presented relative to the motivating effects of what have been generally termed the positive incentives.

12. Friendly conferences. This head includes conferences, only friendly in nature, relating to the work of the high school student, especially work that is poor or below par. A friendly conference as an incentive brings over four-fifths improvement in attitude toward work, this improvement is greater with the men than with the women.

13. Public praise. For this positive incentive we find the data given in Division XIII.

Public commendation is much more effective in securing serious work from high school pupils than any of the strictly negative incentives. However, it is not as effective as friendly confidences, possibly because of the social factors involved. Men and women are affected approximately equally, although public commendation has been given to the women much more commonly than to the men of these groups.

14. Conferences with parents. Conferences, by teacher or principal, recorded here are those occasioned largely by *good* work. Whether the work was perfect on an absolute basis or not the conference pointed out largely the good aspects of the child's work. In this respect only is this heading different from 9.

Although the only essential difference between these data and those discussed above (9) is that the former were not praise while these, to a large extent, are praise, the results as a

motivating agent are marked indeed. Conferences with parents over poor work was found to be generally effective in stimulating to harder work. Conferences with the parents over good work also stimulates harder work but the chief difference lies in the reduction of the numbers of the pupils who worked worse after the conference. The girls, also, react stronger to praise than they do to fault-finding by their teachers to the parents.

15. Remission of assignments. This is another positive incentive, the opposite of extra assignments.

We find that more of our subjects recall having been let out of assignments than can recall having been given extra assignments. The per centages are 37.1 against 51.0. While the men recalled more extra assignments than the women the latter recall a preponderance of remissions. This is interesting in passing. Most interest, of course, is with the relative effectiveness of these contrasted incentives in securing better efforts on the part of the students. Four times as many work better when excused from an assignment as a reward as when given extra work as an incentive. Eight times as many work worse, when given extra assignments, as work worse with the "easy" teacher who remits assignments from time to time to those doing well in the classes.

These contrasted effects are illuminating.

16. Love affairs. Another factor that is commonly considered to play a not unimportant part in the studiousness or non-studiousness of high school students may properly be taken up at this point. This is love, puppy or apparently real. The data of Division XVI were found.

About half of the students fall in love some time during their four years in the secondary schools. Half of those who do fall in love do worse work than they did before attacked by the heart affliction. This is beyond the control of the teachers and officials except through segregation of the sexes, and then the disturbing element is eliminated only semi-indirectly and for a small portion of the time.

In summarizing there can be no doubt regarding the relative merits of the various incentives for which we have presented data. Reprimands, ridicule, sarcasm, low grades, and additional assignments reduce the seriousness of the students' work rather than increasing it. All the other incentives reported on, as a rule, tend to result in an increased fervor of work. Some of the most commonly used incentives are the very ones that produce the most unfavorable results. Their commonness is no excuse for their continued use.

HOW THE COLLEGE STUDENT RESPONDS TO DIFFERENT INCENTIVES TO WORK.[1]

By Donald A. Laird[2],
Yale University

In the previous report[3] findings were given of the way in which students had responded to various incentives to work in high school. The present report is essentially a continuation of the one just cited. The earlier report should be consulted for the details of the experiment.

1. *Reprimands before other students.* Division I of the Table shows that more of these reprimands have been received by college students than by the same group in high school, unless memories are in error.

Being the subject of a reprimand of this sort produces results that practically cancel each other. There is a loss rather than a gain in motivation so far as the person directly involved is concerned. Sex differences in the frequency of reprimands are not as noticeable in college as they were in high school. Reprimands are taken more seriously in college than in high school among both sexes. The college woman responds with better work to a very considerable extent, but when both sexes are averaged any advantage is lost. Reprimands to others produce more beneficial results, especially in the case of the women. This improvement is much more marked than it was for the high school data.

So far as these results are concerned there is more justification for reprimands before other students in college than in high school. As was indicated in the previous report, the problem is not solved in its entirety by the way in which the students respond by increased or decreased activities in connection with their studies. There are fundamental mental hygienic aspects to be taken up in addition to the work response.

2. *Reprimands made in private.* This occurs with much less frequency than its public counterpart. College men seem to be more favored in the receipt of private reprimands than are college women. The men respond somewhat better;

[1]As from the University of Wyoming.

[2]Tabulated with the assistance of Miss Mary McCarthy, Miss Helen Egan, and Miss Neva Crain, students in Educational Psychology.

[3]This Journal.

TABLE I.

Summarized data of frequency of different incentives and the responses of college students to these motives

	I Public Reprimands			II Private Reprimands			III Public Sarcasm			IV Private Sarcasm			V Public Ridicule			VI Private Ridicule			VII Low Grades			VIII Extra Work			IX Friendly Conferences			X Public Praise			XI In Love		
	M*	W*	T*	M	W	T	M	W	T	M	W	T	M	W	T	M	W	T	M	W	T	M	W	T	M	W	T	M	W	T	M	W	T
Per cent. experiencing	63	65	64	42	28	35	65	35	50	34	7	20	31	11	21	18	16	17	71	70	70	52	26	39	58	46	52	52	68	60	29	29	29
Per cent. working better afterward	16	60	38	75	60	67	16	26	21	23	33	28	25	33	29	43	44	44	28	47	37	25	10	17	95	96	95	75	94	84	45	36	40
Per cent. working the same afterward	37	25	31	25	14	18	24	31	27	23	33	28	33	33	33	57	44	51	14	29	21	65	50	57	4	4	4	25	6	15	27	28	27
Per cent. working worse afterward	46	14	30	0	26	13	60	43	51	54	33	43	42	33	37	0	11	5	57	24	41	10	40	25	0	0	0	0	0	0	27	36	32
Per cent. taking it seriously	71	63	67	87	80	84	44	43	44	61	66	64	50	75	63				45	71	58	53	50	52	100	92	96	80	76	78			
With reference to others:																																	
Per cent. working better	58	73	65				30	28	29				24	24	24				8	7	8	31	27	29				55	55	55			
Per cent. working the same	29	26	27				34	28	31				57	47	52				68	79	73	63	58	60				41	45	43			
Per cent. working worse	13	0	7				36	44	40				19	32	25				24	14	19	6	15	10				3	0	1			

*Men, Women, Total.

both sexes take it very seriously. The returns for "better" and "same" make this form of reprimand much more desirable than the use of public reprimands. The social factor which results in greater energization on the part of others when one is publicly reprimanded, however, is missing in private reprimands.

3. *Sarcasm before other students.* The data for this show sarcasm to be in greater use in college than in high school. The men, again, seem to have been recipients of it more commonly than the women. The results, as the data show clearly, are more negative than positive. This does not have even the social value that public reprimands do in motivating others who are not immediately concerned. In spite of this reprimands are taken more seriously than sarcasm. If there is a significant sex difference, the men react with worse work to sarcasm more often than do the women.

4. *Sarcasm used in private.* Private sarcasm is not used as often as public sarcasm, especially in the case of the women. The results so far as motivation is concerned are practically the same, whether it is public or private.

5. *Public ridicule.* The data in Division V show that this belongs in the same class with reprimands and sarcasm. In these instances what little gain is noticeable in working better after the ridicule is offset by the cases in which the situation is responded to with less work. Again, ridicule of one person does not increase the work tendencies of the other students as it did in the case of reprimands.

6. *Private ridicule.* Privacy in the ridicule changes the effects markedly, as the data for this show. If ridicule is to be used at all, it should be in private. Its use with men will likely be more effective than with women.

7. *Low grades as a stimulus.* In the minds of the students they have received lower grades than they really merited with a surprising frequency. This has occurred in twice as many cases in college as it did in high school. That it has not been effective in prompting better work is shown by the returns for this section. The social effect is toward sameness or worseness in work with an instructor known to give decidedly low marks; the effect upon the individual is in the same general direction. In high-school students there is a *slight* tendency in the other direction.

8. *Extra work as an incentive.* This is found with about the same frequency as in high schools. The general results are also much the same—practically negative. There is some favorable social effect when others receive the extra work, but very little when it is inflicted upon one himself.

Beginning now the so-called positive incentives we will first take up

9. Friendly Conferences. The tabulation for this shows that these are not as rare as the collegiate critics would make one believe. Thank fortune they do occur with a noticeable frequency! The data show that they are very effective in motivating the college student to better work. The more mature student of college seems to react stronger to these conferences than does the high school student.

10. Public commendation. Within the immediate memory of our subjects this has occurred with even greater frequency than the friendly conferences. Fortunately so, for this is another valuable motivating agent, as the data show. Both individually and socially this seems to be good for the working characteristics of the group. Both sexes are affected very much the same in their responses. This is not taken as seriously as friendly conferences are, however.

11. Love affairs. These are not directly traceable to the instructor, while the other topics that we have been listing are in a very large measure. These were reported by the students as shown in the tabulation. The effects of this as a motivating agent are almost balanced; the men, however, seem to be stimulated to a bit harder study. In comparison with the high school affairs the reports are much more encouraging.

12. Honor books. In the school in which this survey was made honor books are given by the president at each commencement to the students recommended by each department for this honor. There were 16 per cent. of the men and 13 per cent. of the women who admitted that this possible reward was a stimulus for them to work harder.

13. Parents' attitudes. There were 69 per cent. of the men and 70 per cent. of the women who stated that their parents were eager for them to make good grades. This modified their work as follows:

	Men	*Women*	*Totals*
Per cent. working better	73	90	81
Per cent. working the same	27	10	18
Per cent. working worse	0	0	0

14. Honorary scholarship fraternities. This stimulated 16 per cent. of the men and 8 per cent. of the women to better effort.

15. Social fraternities. Eighty-eight per cent. of the men who belonged to fraternities and 90 per cent. of the sorority women stated that they worked harder for grades since becoming a member. In the present school this is very

credible. There are but few Greek letter organizations and rivalry between them is keen, due to the faculty stimulation of the inter-fraternity council which holds scholarship contests.

Summary

The college student responds with more earnest work to the so-called positive incentives rather than to the negative incentives. There is but little difference between college students and high school students in the response to the incentives studied.

THE PSYCHOLOGICAL ANALYSIS OF SPELLING

By Edith L. Hilderbrant, Thornton Township High School, Harvey, Illinois

Much of the material presented in this paper is based upon the testimony of students. During the past year the writer has had the privilege of working with a high-school faculty of thirty members and a student body of six hundred in a united effort to raise the standard of spelling ability for the school. The plan used was co-operative in a high degree, hence the testimony offered bears upon the value of concerted effort in such project to increase the proficiency of the individual.

Certain memory processes are bound up inseparably with spelling. The student associates spelling with sounds that he has heard, with images of words or parts of words that he has seen, and with movements that he has performed, as in pronouncing or writing the letters of a word. In spelling he recalls certain experiences he has had in the past, and reproduces them.

As a pupil in the lower grades, or perhaps earlier, the child receives impressions relating to spelling, from the sounds of letters as spoken first by another and then by himself. He perceives that a particular word has an arrangement of letters peculiar to itself, and that quite commonly the sound of the word suggests the arrangement of the letters.

Once he has sounded and spelled the word orally, it is easier to do so upon second trial, because of reactions already set up in the articulatory organs. Repeated trials tend to fix the spelling in mind, a certain pronunciation always suggesting the same spelling. Pronunciation and spelling are closely correlated. It is not unusual for a person to try to spell a word by first pronuncing it, thus reproducing as nearly as he can some past experience relating to the spelling of the word.

Whenever practicable, advantage should be taken of the possibility of relating spelling to sound. But not all words are spelled as they sound. To base the spelling of English words entirely upon pronunciation would soon lead to confusion.

There are in the English language only twenty-six letters. These must represent at least forty distinct and separate

sounds. Consequently, some letters, or combinations of letters, represent several sounds each; for example, *a*, as illustrated in *ate*, *at*, *arm*, *path*, *care*, *tall*, and *what;* and *ough* in *though*, *through*, and *tough*. Certain sounds may be represented by different letters, or combinations of letters, as in *no*, *low*, *owe*, *sew*, *four*, *beau*, *dough*, and *chauffeur*. Sometimes a single spelling represents more than one sound, as in *lead* and *tears*.

Then, too, pronunciation varies between different parts of the same country or between different countries that use the same language. A *fish* in Illinois is a *feesh* in Ohio; *races* in Indianapolis are *rices* in Harrisburg; *heart* in America may be *'art* "*h*overseas."

Even if simplified spelling, with a single sound for a single letter, and a single letter for a single sound, did become effective, there would soon be divergence of opinion as to spelling, because of these different pronunciations in different localities. To make simplified spelling a complete success, a uniform method of pronunciation would need to be adopted.

It is obviously impossible always to spell correctly by sound. The individual finds it necessary to form associations between letters. Sometimes these associations are purely arbitrary. When several different letters, or combinations of letters, may be used to represent a sound, it is the child'-problem to learn which one represents the sound in a pars ticular word.

In recalling a word, associations between the successive letters of the word come to the mind. These associations have been formed in the mind as the result of former experiences. Sometimes they appear readily upon the field of consciousness, as in the case of a really familiar word; and sometimes they are recalled only with difficulty. A strange word that bears practically no relation to the life experiences of the individual, and the spelling of which is learned in a commonplace way, is more than likely to be spelled with difficulty, if spelled correctly at all, when a later occasion requires its use.

Sometimes a word that is rather unfamiliar to the student impresses itself indelibly upon the mind as the result of a single experience. For example, a high-school girl misspelled *subtle* in a spelling contest which took place before an assembly of students. She could form no mental image of the word at the time, and she could not recall its meaning. Some of her mental processes were doubtless inhibited because of the occasion upon which she was asked to spell the word, though she had spelled more difficult words just previously.

This girl declares she will never again misspell that word,

no matter what the circumstances may be. She admits that she had heard the word before, but she could recall it only in a vague sort of way. A lack of clear associations caused her to fail upon one occasion, but, because of the most vivid associations derived from circumstances, she did not fail on that word when it appeared in later tests.

It was observed in the spelling campaign to which the first paragraph of this paper refers that spelling bears a close relation to reading. The inference is not so much perhaps that spelling assists greatly with reading, as that reading assists greatly with spelling. The "bookworms" are almost invariably fine spellers, the reason doubtless being that they have seen the correct forms of numerous words, particularly common ones, so often in their reading that these forms are familiar to them. (No attempt was made to teach unusual words that the students would not recognize or that they would not be likely to use.) Hypothetically, at least, the kind of word perception that favors reading also favors the development of a high degree of spelling ability.

Except where the words are similar, the good readers, so far as reading itself is concerned, make fine progress without any study of spelling. This much is granted, however, that occasionally when a strange word is observed, the reader spells it, associating it as he does so with words having their letters in a similar arrangement. In fact, beginners who have learned to read by the "ABC" method are more than likely to do this. No skilled reader, though, stops more than once in a lifetime to spell out a word, with the idea of establishing a relationship between it and some other word that he knows. He sees at a glance whatever relationship exists. The appearance of the word as a whole, or possibly its division into syllabic or phonogrammic parts, and not the analysis of the word into letters, serves to establish necessary connections.

Occasionally one finds a good reader who is a poor speller. It seems that his ability to perceive a word, though satisfactory for reading, is not sufficiently precise to assist much in spelling. Yet when specific, favorable reactions have been set up in the spelling of a word, reading tends to preserve them. A person whose powers of perception are so inadequate as to cause him to be a poor reader is not likely to observe small differences between words, hence is not likely to be a good speller.

The phonetic method of teaching reading is not most highly conducive to the development of spelling ability, though it tends to promote the method of spelling by sound. Sometimes the individual lays too much stress upon phonetic elements.

He treats them as units, and so obstructs his view of the word as a group of significant parts or as a whole. This method, however, tends to reduce rote memory. In case of proper word perception, it gives the individual the benefit of all the relation that exists between the spelling and the sound.

Spelling links itself with writing even more closely than with reading. At an early age the student learns to write words consisting of letters. His ability to spell is based partly upon associations that he has built up between movements, and partly upon associations established between elements of perception. It is not unusual for a person who is uncertain of the spelling of a word to write it, or at least to go through the motions of writing it, before he uses it, in order to make sure that his spelling is correct.

Sometimes a word is written in two or more ways before a decision as to accuracy is made. Often when the individual does not actually write the word, he imagines himself doing so, before he decides what form to use. One high school student wrote, as an argument favoring the study of spelling in the high school, "Also in correspondence you feel comfortable when you do not have to stop and write a word three or four times before you can find the correct way to spell it."

To learn to spell certain words by associating spelling with meaning helps to make the impression lasting. It is practically impossible to spell any great number of homonyms without taking the word content into account. Since homonyms sound alike, the differentiation is necessarily based upon meaning.

There are probably no "natural-born spellers." The notion that spellers, like poets, are "born, not made," is false. Good spellers are good spellers because they have at some time early in life had their attention called to the arrangement of letters in words. They have had some special practice in "producing the letters in serial order." Building up associations in this manner is one form of memorizing. Motor reactions, of the auditory and articulatory organs in speaking, and of the articulatory organs and the hand and the eye in writing, form an essential part of the process.

It is a rare child of even ordinary intelligence that cannot be taught to spell. Hollingworth says that "a few of the very extreme cases of disability will be unable to learn to spell, even with the maximum of effort." Ineffective control of the mechanisms governing articulation and writing sometimes factors among the causes of poor spelling. Misspellings are quite commonly due to mispronunciations. A child brought up in surroundings where he hears "askin'," "ketch," "labra-

tory," and other slurred forms is not likely to use the correct letters when he tries to spell one of these words, unless his attention has been called to his particular failings.

A lack of interest often accounts for poor spelling. Lack of application plays its part, as suggested by this statement by a high school girl: *Spelling is easy when one studies.* Ineffective methods of teaching must shoulder much of the blame for lack of interest and application.

It seems more difficult in adult life than in childhood for a poor speller to increase his spelling ability. Certain modes of reaction have become fixed, and new ones are hard to acquire. Most poor spellers whose faulty methods of learning to spell in youth have not been corrected become complacent about the situation in adult life, and make no extra effort to learn spelling. If circumstances require, they look up in the dictionary a word they wish to use. Too often they fail to concern themselves about the spelling, preferring rather to take a chance than to perform the necessary labor of insuring accuracy. The writer knows of a woman who says that she has at times awakened in the night with a haunting fear of evil consequences that might result from her failure to look up certain words that she used in a manuscript mailed the day before.

Persons who have grown complacemt about bad spelling would find at times, if all conditions were revealed to them, that their inability had spelled for them business, professional, or social failure. A "big" man in English at a great university tells how he learned to spell "sincerely." He had finished four years of high-school work and four years of University English. He was ready for a position as teacher of his chosen subject in a secondary school. He applied for such position. The head of the English Department made reply, as she returned his letter with the word "sinserely" checked, that her school did not employ teachers of English who could not spell common words correctly.

The writer recalls the tales of a woman who said that her husband's inability to spell almost prevented their marriage. During the days of their courtship, which was carried on mainly by correspondence, this man, who possessed a Bachelor's degree and who had had some experience as Superintendent of Schools, persisted in calling his fiancée "deer" instead of "dear," and "angle" instead of "angel." He made other breaches quite as offensive. Several times she had been on the point of giving him up for no other reason than that he could not spell. Fortunately, let it be hoped, there was some strong counteracting influence. To-day Little Wife has the

pleasure of examining all of her husband's outgoing mail for fear that some peculiar turn that he might give a word might result in the loss of a coveted position, or that it might bring social ruin or financial disaster.

The learning of spelling requires the active concentration of mental processes upon the word to be learned. For the teacher to assume that a sufficient number of words for the student's use will impress themselves upon the mind of the student without any special effort on the part of either student or teacher leads to an erroneous practice for which the former often pays with dear experience.

One important duty of the teacher of spelling is to help the student to establish meaningful associations. This consists, as noted above, in taking advantage of relationships between letters and their sounds, whenever possible; also, of using simple rules and principles that are helpful.

A few major rules clearly understood yield the individual greater benefit than can possibly be afforded by a hazy knowledge of many rules. To consider a number of instances in which a particular rule applies, and to lead the student to draw a conclusion embodying the rule, insures a fair degree of mastery of the underlying principle.

Rules should never be presented to the student in such formal manner as to be incomprehensible to him. To adapt the expression of the rule to the age or ability of the student helps to give him the needed information. To express the substance of the rule in the first person often helps the individual to connect its application more readily with his own experiences. This is illustrated by the following statement, made after thoughtfully considering examples like *love, lovable; skate, skating;* and *fine, finer:*

> When a word ends in silent *e*, I drop the *e* before adding a syllable that begins with a vowel.

A careful consideration of exceptions, for example, *peace, peaceable; singeing* and *dyeing;* and *lie, lying*, might lead to the development of a further statement, beginning: I make three important exceptions to this rule.

A really good speller in high school misspelled the word *plainness*. Her attention had never been directed particularly to the spelling of words like *misstate, unnecessary, meanness* and *generally*, nor to the content of this simple statement: I usually retain the final letter of a prefix or root even though it is the same as the first letter of the word or suffix. The girl omitted an *n*. The slightest acquaintance with the rule would in her case have prevented the error. This pupils'

getting a comprehension of the rule after the error was made tended to fix it permanently in mind, especially since the error was made upon an occasion when a perfect score would have meant success.

A school may adopt the plan of having spelling taught "incidentally;" that is, by requiring the student to make note of the correct spelling of words as they appear to give difficulty in class work. Or it may make a careful, intensive study of spelling. Lists of words, scientifically derived and carefully graded, are procurable from various sources. For a faculty to determine by investigation what words are most commonly misspelled by the student body under its direction, and to lay stress upon the correct spelling of these, helps to develop a "spelling consciousness" that will tend to insure the individual's locating and correcting his own errors. It is highly advisable for a student to keep a separate list of the words that he himself misspells in any particular subject and to report on these at intervals to the teacher of the subject. Such plan gives an association between spelling and content that can hardly be improved upon by any other method.

As seen above, inability to spell often results from lack of interest and application, due frequently to faulty methods of instruction. Usually all that a child needs in order to make him a good speller is a correct mode of attack and an awakened interest.

If drill is uninteresting—this criticism is sometimes made—the reflection really falls upon the teacher. The child readily recognizes spelling as an aid to expression, and he is more than willing to make the necessary exertion to acquire the art. He aspires to use the English language with a high degree of accuracy.

In connection with the experiment in high school, referred to above, when the students were asked as a part of their eighth and last monthly test in spelling, to give in a paragraph or two a sincere, honest expression of their thoughts on any of the following subjects, the entire balance of favor was thrown toward special instruction. The subjects announced were:

The Importance of Correct Spelling.
Should Spelling Be Taught in the High School?
Why I Like Spelling.
Why I Dislike Spelling.

The great majority of the students wrote on "Should Spelling Be Taught in the High School?" and all but seven of these maintained with pointed arguments that it should. The few statements that follow typify hundreds of others.

All but one of the expressions quoted from students in this manuscript were written by persons below the quartile that ranked highest in spelling ability. Their statements are quoted verbatim regardless of error of any kind:

> A person who does not learn spelling in high school will learn it in business at his own expense.
>
> I, more than an excellent speller, have the right to say spelling should be taught in the high school.
>
> I firmly believe that our high school has taken a great step in the spelling contests of the past year. If every school in the United States would take up spelling the first fifteen minutes of the first school hour, think of the improvement which would come over our country.
>
> I think spelling should be taught in the high school. The first of the year we found that many of the students were deficient in spelling. Lately our spelling standard has been raised considerably due, we believe, to the instruction given us during the year.
>
> It helps to start the day right by starting it with a light or easy subject.
>
> The time for impressing on the mind the right spelling of a word is when the mind is young and impressionable and that time is when the boy or girl is attending high school.
>
> From the short time of fifteen minutes per day (two days per week) that we use for spelling, I think we gain in one year here an amount of learning equal to the amount we could get in the graded school in three years. And with this great gain in view I think the students should be very glad that they have the opportunity to have spelling taught in the high school.
>
> Spelling should be taught in the high school. Many of the boys and girls who come to high school have a hard time in writing anything because they are not able to spell. I had a hard time and find now that spelling has done me a great deal of good.

Spelling ranks quite commonly as an unattractive subject. Teachers too often regard spelling drill as an exercise that must be endured; children think of it as an ordeal that must be suffered. Cook and O'Shea write, in "The Child and His Spelling," "In this connection, it may be worth while to note that there probably is no study in the curriculum which is less attractive to children than spelling as it is ordinarily taught. In the course of the investigation described in this volume, inquiry was frequently made of teachers regarding the interest which their pupils took in spelling, and the answer was always the same in effect—children almost hate their spelling, except when they can make it an occasion for a contest of some sort, as in 'spelling down'."

Practical experience and the psychology of adolescence bear out the statement that the contest affords an effective

means of motivating the work in spelling. It stimulates the student to produce much more favorable reactions. The adolescent boy or girl is at an age when practically every kind of match appeals to him. To let him know that his efforts to learn to spell will afford him an opportunity to match his ability with that of others, or will open for him the possibility of making the "spelling team," furnishes a great incentive. It helps to arouse in him a keen "spelling conscience," which "will not permit him to leave a word until he is sure it is correct."

The student's liking for a subject is a matter of psychological importance. It is often indicated by his standing in the subject. What a student can do best he likes best to do. He gains a certain satisfaction and self-confidence from the mastery of work that is adapted to his needs, interests, and capacity. These facts are borne out by statements like the following, made by high school students:

> I like spelling mainly because it is interesting.
>
> I like spelling because I am proud to know if I know how to spell, I can secure a position any place.
>
> I like this subject because it has saved me much embarrassment in times past.
>
> The person who likes to spell will learn more than the person who does not like to.
>
> I like spelling better than any other study.
>
> It helps brighten your school work and makes you a good scholar.
>
> It not only makes us more interested in school but it helps us along with our school work.
>
> I like spelling because it helps to increase my vocabulary and gives me correct spelling habits. When once the wrong spelling enters my mind it is hard to forget this spelling.
>
> It is really a great satisfaction to know that you are a good or a fair speller.
>
> I like spelling because of the joy I get out of it and the knowledge of new words I learn.

It is a significant fact that practically all of the better spellers expressed themselves as being heartily in favor of special spelling instruction in the high school. It is even more significant that the mediocre and poor spellers, who had no chance whatever of making a fine show of their ability, expressed themselves quite as favorably.

The appeal of the contest was voiced by both good and bad spellers. One of the weakest of the freshmen said, "The one that wins the contest most generally likes it. I like it because

when you have a contest you will learn more than when you set and study spelling."

The comments of the winners are always in favor of the co-operative plan, of which the contest is an interesting feature. But when one considers that students that have not the slightest chance to win give expression to such statements as the following, one appreciates more and more the value of concerted action in getting the kind of mental reactions that mean learning:

> When you have teams like now it makes the students try to make their team win and that is why I think spelling should be taught in the high school.
>
> The reason why I like spelling is because it will help us in later life. It is also a game in the high school which is played with great enthusiasm. The whole school co-operates.
>
> It really is fun to spell words or have a contest.
>
> Spelling is interesting when there are contests such as we have at school.
>
> I also think that the way spelling is conducted here is the right way, as it gives those who are not so good in spelling [a chance] to become good spellers.

In conclusion it may be said that the principles that underlie the proper study of spelling may be derived from the principles of habit formation in general. "If critical, conscious processes are not important in forming correct spelling habits, it is an exception to what is generally held to be the relation of conscious direction to habit formation." (LULL)

To make arbitrary associations, as sometimes required in spelling, repetition is necessary. Sufficient repetition must be made to fix the spelling in mind. In making repetition, attention must be given directly to the work of spelling. Motor habituation conduces to the retention of correct forms.

It is important in teaching spelling to avoid wrong associations. In the proper use of the drill method, an effort is made beforehand to see what words the student is likely to misspell, and to focus his attention upon the correct forms of these. To make the value of the spelling drill carry over to other subjects, in which the individual spontaneously writes a word without focusing his attention directly upon its spelling, much of the work in dictation should be given in sentence form. The column test may profitably be used occasionally. Experiments have proved, however, that some of the skill gained in the column presentation of words is lost when the individual, especially the poor speller, writes the words in contextual matter. There is not so much loss for easy words as for hard words.

High school students, as a rule, prefer sentence dictation to word dictation. The former tends to prevent centering the attention upon particular words, and so possibly raising doubt about the correct arrangement of letters, when accurate spelling of the word has become practically automatic. They prefer written contests to oral, because the former give every one a chance to compete, and because in writing a word the spelling of which is not yet fixed in mind, more opportunity is afforded for considering different spellings.

In class study it is important that unfamiliar words be seen, heard, pronounced, and written. Each method calls for a different set of associations, and so one reinforces another. To write a word insures a firmer grasp than merely to hear, see, or pronounce it. Writing involves both visual and kinesthetic sensations. It may be that a single student does not need to have a word presented in a variety of ways in order to enable him to master it. The advantage of using different methods comes, however, in meeting the varied needs of many individuals in class instruction.

Motivating the work in spelling soon makes it a subject of interest to the student. Co-operation sets up for him a favorable mental attitude. By the time the individual reaches adult life correct spelling should be automatic with him. It should not be necessary for him to consult the dictionary for the spelling of common words, nor to guess, nor to ponder over imagined forms. As a rule, the good speller, when he reaches adult life, has so firmly established the habit of spelling words correctly, that he never falters in doing so, except possibly at times when he turns the light of consciousness upon his act and so becomes aware of particular parts of a word. An effective study of spelling in youth will almost invariably reduce this subject to a matter that calls for little consideration in later years.

THE NEED OF MORE ADEQUATE MEDICAL EXAMINATION OF SCHOOL CHILDREN IN THE UNITED STATES

By Marvin F. Beeson, Ph. D., State Teachers College of San Diego

The fact that approximately one-third of the men of draft age in the United States were rejected as unfit for military service during the World War, and the further discovery that a somewhat larger proportion of men from the rural districts were defective than from the cities aroused considerable interest at that time in the physical condition of the school children in this country, both with regard to the opportunities provided for physical education, recreation, and play facilities, and with regard to medical inspection and the prevalence of physical defects.

In England similar conditions were discovered some years earlier at the time of the Boer War, and extensive remedial measures were instituted very promptly for correcting the conditions revealed.

In the United States, however, not a great deal has been done to remedy in any thoroughgoing way the neglect of physical care which was brought out in the examinations of the draftees during the War. In fact, comparatively little thought and attention seem to have been devoted to the matter at all by our educational authorities and administrative officers, with the result that this country lags behind several of the European countries in systematic provision for the medical examination and treatment of school children. In short our organization for medical inspection of schools is very unsystematic and inadequate.

Of course, the fact that this government makes no provision for a department of education, as most of the other leading nations have done, is a handicap to start with. Indirectly the federal government does a good deal through the bulletins of the Bureau of Education and other government agencies to encourage health education and physical training. But these activities are generally devoted to matters of child hygiene and sanitation rather than to the subject of medical examination and the treatment of physical defects.

However, the government has given some attention to this matter too. Bulletin 47 of the United States Bureau of

Education for 1916 is devoted to a discussion of certain aspects of the subject. It shows that at that time 23 of the states had laws and regulations making some provision for medical inspection of the schools. These states were mostly in the North Atlantic group and the Western group. The first law regarding medical inspection was made by New Jersey in 1903. The report shows that in 12 of the 23 states the medical inspection was merely permissive, while in the other 11 it was mandatory. Even in those states where medical inspection is mandatory, however, the examinations are often merely a matter of form and routine, and the law is not seriously enforced. Colorado may serve as an example of this condition. In that state medical examination is compulsory, but if there is no local provision for systematic inspection by medical authorities or school nurses, the teachers must do the examining. Yet the teachers receive no training for this work, so that any examination conducted by the teachers is but little better than no provision at all.

In 1911 the Russell Sage Foundation conducted an investigation to determine the status of medical inspection in American cities. This report showed that very few towns had made any provision for school medical service before 1900. The report covered 1,038 cities, or nearly 90% of the municipalities having organized systems of schools under the direction of a superintendent. Of this number only 43% had systems of medical inspection of any kind, and only 21% provided for complete medical examinations. The report does not cover conditions in the rural sections, but they were doubtless much worse than in the cities. And the majority of our population was rural. Of course there has been much improvement since that time, however.

In most places the physical examinations were instituted only for the purpose of isolating cases of contagious diseased, but gradually their functions have been extended to include a much more extensive program.

In general there are now three methods by which the physical examinations are conducted in the United States. First, they are made by regular physicians. The report of the Russell Sage Foundation shows that in 39% of the towns they were limited to the detection of contagious diseased. In 25% of the cases they included only tests for vision and hearing, while only 21% of the towns provided for complete physical examinations, and 7% provided for the examination of the teeth by dentists.

Examinations by physicians are, of course, preferable, but this plan is relatively infrequent, probably because of the

greater cost of the plan. Yet the salaries paid to examining physicians are extremely inadequate, the average in 1916 being from $100.00 to $200.00 a year, though many gave their services free, and some received as much as $4,000 a year for their work.

Second, a school nurse or a country nurse, or several such nurses may be employed to conduct the examinatons. This seems to be the most common method of providing for medical inspection. This is inferior to the former provision; yet, in most cases the nurses have doudtless had some specialized training for their work which enables them to detect the more serious cases of physical defects. On the other hand, their work rarely extends to the inspection of the sanitary and hygienic arrangements of the school plant, and, in fact, very few would be capable of pointing out deficiencies or making suggestions for extensive improvements in the school plant.

The third plan is to leave the examination of the children to the teachers. This is, of course, the most unsatisfactory method of dealing with the problem. The teachers have not prepared for this work, and probably most of them do not even realize the importance of it. Furthermore, they are so burdened with other duties that the whole matter is likely to be neglected, slighted, or done in a very casual and perfunctory manner. The examinations of school physicans show that most of the defects discovered were unknown to the teachers.

The prevalence of physical defects among school children is often underestimated by school people. The results of careful physical tests in New York City show that about 74% of the children have one or more physical defects serious enough to interfere with their school work. Ayres reports that this proportion is 80% for the children of normal age, and 75% for over-age children. The reason for the difference seems to be that in general older pupils have fewer physical defects than the younger ones. In the same study Ayres also showed that the pupils with physical defects made, on an average, 9% less progress than those without such handicaps.

These conditions are illustrated more clearly by the following table.

TABLE I.

Showing Relation between Number of Physical Defects and Number of Years Required to Complete the Elementary School.

Children with	no defects	8 years
"	" defective vision	8 years
"	" defective teeth	8.5 years
"	" defective breathing	8.6 years
"	" defective tonsils	8.7 years
"	" defective adenoids	9.1 years
"	" enlarged glands	9.2 years

It appears, then, that the average pupil is not a perfectly healthy or normal child, but is suffering from one or more physical defects which may interfere with his success in school. We have recognized our obligation to provide compulsory education for all children from the age of six or seven to fourteen, but have made comparatively little effort to enable the child to profit most from his instruction by seeing that all handicaps in the form of physical defects are removed.

The following table shows the extent of certain physical defects as determined by Dr. Thomas D. Wood, and also indicates the difference in the prevalence of these defects among rural and city children.

TABLE II.

Prevalence of Certain Physical Defects

(T. D. Wood)

Defective teeth	City children	33.58%
	Rural children	49. %
Defective tonsils	City children	16.42%
	Rural children	28.14%
Defective eyes	City children	13.4 %
	Rural children	21.0 %
Diseased adenoids	City children	12.5 %
	Rural children	13.4 %
Malnutrition	City children	7.65%
	Rural children	16.6 %
Diseased ears	City children	1.3 %
	Rural children	4.78%

There are many reasons which may account for this difference in favor of the city children. Besides the factor of selection, which is probably very important, surely the inferior medical inspection in the country, and the lack of adequate follow-up work and treatment are largely responsible for these conditions. Besides these factors, the relatively poorer sanitation and hygiene in the home, the greater amount of work demanded of rural children outside of school hours, the deficiency of opportunities for play, and the greater ignorance of the laws of sanitation and hygiene found among rural people are probably sufficient explanations for the conditions found.

Since the plan of providing medical inspection by means of school nurses is the one most frequently used in this country it might be worth while to consider the efficiency with which this work is conducted by the school nurses.

For this purpose the following summary was made from a study conducted under my direction last year in Grand Junction, Colorado, a town of about 10,000 inhabitants,

showing the proportion of common physical defects found by the school nurse during the year of 1922-23 which were considered sufficiently severe to interfere with the school work. The summary includes the results of two physical examinations for each of 1,510 pupils made during the past school year. The school nurse in that town is an efficient one, and devotes her full time to this work. As norms for comparison, the figures of Wood for city children are given, as well as the averages compiled by Terman from a number of sources. The latter are found in his book on the "Hygiene of the School Child."

TABLE III.

Findings of School Nurse in Grand Junction in Comparison with Norms of Terman and Wood as to Percentage of Certain Physical Defects

Defect	*Terman's norms*	*Wood's norms for cities*	*Results of examination by school nurse*
Malnutrition	10-15%	7.65%	24%
Defective Teeth	90%	33.58%	19%
Diseased tonsils	12.5 %	16.42%	13%
Defective eyes	15-30%	13.4 %	4.9 %
Defective adenoids	8%	12.5 %	3.9 %
Diseased ears	2-5 %	1.3 %	.9 %

Thus it is seen that with the exception of malnutrition the proportions of physical defects discovered by the nurse are almost invariably much lower than those expressed by the norms established by medical examinations. This is, of course, as one would expect, since the nurse's examinations are much less complete, thorough, and technical than those of the physicians.

The greatest discrepancy is seen in the case of the visual defects, and this is very significant. The most serious visual defects are just the ones most difficult for an untrained person to detect, namely, latent hyperopia and the various forms of astigmatism, while the relatively less serious defect of myopia can easily be detected by means of the Snellen Charts, or other similar tests.

The conditions revealed with regard to malnutrition are no less significant. The classification of malnutrition is made according to the only purely objective test of the series. This is based upon ratio of weight to sex, height, and age. The pupil is considered malnourished if he is 10% or more underweight. Yet the extent of malnutrition here is a great deal higher than that found by physicians in other places.

That the pupils in Grand Junction had fewer defects than are generally found is altogether unlikely, for the proportion

of malnutrition is high, and the other physical defects are undoubtedly correlated with malnutrition. Also attention is again called to the fact that the test of malnutrition is an objective test. That seems to indicate that the school nurse generally detects only the more obvious physical defects, and fails to detect the subtler ones. Of course we must not insist too strongly upon this point, since all of these tests were made by only one nurse, but she was well trained and exceptionally well informed, so that these results can probably be accepted as typical.

No consideration has yet been given to the most important aspect of this question, that is the follow-up work and treatment of the defects discovered. It seems that in most towns the parents are notified of conditions discovered, and the correction of the defects is left to the parents. Dr. Roberts of the school medical service of Memphis says that only about 20% of the parents commonly have the physical defects of their children corrected when notified. Hence this method of dealing with the situation is altogether inadequate.

In some places in case the parents are unable to pay the physician's fee, free treatment is provided either by the city authorities, by philanthropic organizations or by the voluntary services of physicians. In other towns free clinics are maintained by the school authorities for the treatment of these cases. Dental clinics are the predominating type, though other kinds are found in larger cities. Certainly better provision ought to be made for the free clinical treatment of children found to be defective.

As a contrast to the inadequate and rather chaotic conditions of school medical service in this country are the provisions made in England for this type of work. In no other country has such full and complete provision been made for efficient and universal medical examination and treatment of school children. By a national law of 1907 medical inspection of all pupils was made compulsory throughout the whole of England, and adequate organization of the medical work was provided for. These provisions were further extended by the Fisher Act of 1918, so that now there is connected with the national Board of Education a medical staff consisting of a chief medical officer and twelve medical assistants to direct and supervise the school medical service of the realm. The counties, or equivalent local educational authorities, provide local medical officers and nurses. The central government defrays approximately one-half of the expense of the school medical service.

In 1919 the medical service in England included 772 school

medical officers and assistants, 441 specialists, and 1,527 school nurses. These were assisted by the school attendance officers, the teachers, and after-care committees to provide for the follow-up work.

The law requires that each child shall be examined four times during his elementary school career, once upon entering school, again in the third and in the sixth year of school life, and at the time of leaving school. A mental examination with the Binet-Simon Scale is also given to each pupil by the examining physician, and by this means all feeble-minded pupils are isolated, and sent to special day schools.

The parents are requested to be present at the physical examinations and are informed of the defects and asked to have them treated. If the defects discovered are not corrected by the parents, free treatment is usually provided in the school clinics. Of the 319 counties and equivalent local authorities in England 219 had established school clinics to the number of 480.

Of all the nations in the world England is placing the greatest emphasis upon physical development, both in the form of recreation, play, and open-air sports, and also in the form of attention to physical defects in school, as well as the treatment of these conditions in free clinics, the provision of free meals, and the maintenance of open-air schools. It seems that we cannot afford to make less adequate provision for the physical welfare of the pupils in the schools of the United States.

STUDENT GRADES IN REQUIRED AND ELECTIVE COURSES

By Albert Benjamin Cunningham, State College of Washington

The charge has been made against teachers that they give higher grades in elective than in required courses, in order to attract students to the former and thus build up their own departments. It has also been said that students do better work in courses they elect than in those they are required to take; and this has been urged as an argument in favor of the elective system in our American colleges.

The present study bears upon both these points, and may be taken as an indication of the truth they contain: we shall take the grades given by teachers in required courses and compare them with marks given in elective subjects, to see whether there is any appreciable difference in distribution. The one outstanding defect of the study resides in the inadequate number of records available, an unavoidable consequence of the fact that often students elect to take required courses.

In the Department of Physics a total of 179 univocal grades are accessible, 63 given in required courses and 116 in elective. Their percentile distribution is:

Grade scale	60-70	70-80	80-90	90-100
Required	.16	.19	.30	.35
Elective	.05	.21	.43	.31

That is, 11% more students were failed in the required courses than in the elective; but on the other hand, 35% of the students in required courses received excellent grades as opposed to 31% in elective work.

For courses in Latin, we have a total of 688 grades; 450 in required and 238 in elective courses. Their distribution is somewhat comparable to the above.

Grade scale	60-70	70-80	80-90	90-100
Required	.13	.20	.27	.40
Elective	.01	.24	.33	.42

Here the elective courses hold quite a marked percentage of higher grades. 75% are in the second half of the scale; with .01% of failures as opposed to .13% in required subjects.

The following scale is for courses in Greek, just 86 grades being included—60 for required and 26 for elective.

Grade scale	60-70	70-80	80-90	90-100
Required	.00	.20	.45	.35
Elective	.00	.12	.19	.69

Here 69% of grades for elective courses are put in the highest fourth of the scale, or 34% more than are placed in the same class for required courses.

A better selection is found in the following for English courses, since this subject is more generally taken and accordingly supplies a greater number of grades. 570 are included, 392 for required and 178 for elective.

Grade scale	60-70	70-80	80-90	90-100
Required	.04	.07	.49	.40
Elective	.05	.07	.46	.42

One cannot but observe how extremes are flattened out by an increased number of cases. The above table for English shows a remarkable similarity of grouping, while the one for Latin, also containing quite a large total, likewise inclines to uniformity with the exception of the percentage of failures.

Perhaps the 70 grades distributed according to the table below are not enough to make any valuable indication as standing alone. But they will enter the general total. They are for courses in economics:

Grade scale	60-70	70-80	80-90	90-100
Required	.26	.21	.37	.16
Elective	.20	.30	.50	

The only striking thing about this table is that it shows a lower marking for elective than for required courses. But the grades are so few as to be of doubtful value. The following is

for Mathematics, totaling 190 grades, with 72 required and 118 elective:

Grade scale	60-70	70-80	80-90	90-100
Required	.19	.11	.39	.31
Elective	.17	.14	.42	.27

For the department of psychology are 160 grades; 113 in subjects students were required to take and 47 in subjects taken through choice. Surely there is quite a marked variability between the two types.

Grade scale	60-70	70-80	80-90	90-100
Required	.08	.14	.51	.27
Elective	.02	.12	.38	.48

The final study under this heading is from the department of public speaking. 203 grades in required courses and 146 in elective make a total of 349.

Grade scale	60-70	70-80	80-90	90-100
Required	.05	.14	.46	.35
Elective	.06	.10	.30	.54

It is to be regretted that more grade judgments could not be gathered under this point. But owing to conditions already explained it is excessively difficult to isolate them with certainty. Just how representative the present totals would prove in case a far greater number were added to them is therefore conjectural. It is the opinion of the writer that there would not be much change; but the totals are given and must speak for themselves.

NUMERICAL AND PERCENTILE DISTRIBUTION OF 2,292 GRADES FOR ELECTIVE AND REQUIRED SUBJECTS

	Numerical				Percentile			
Grade scale	60-70	70-80	80-90	90-100	60-70	70-80	80-90	90-100
Required	121	199	539	517	.09	.14	.39	.38
Elective	58	147	351	360	.06	.16	.39	.39

The similarity between the two types of markings is seen to be strikingly great; the correlation is .86. And it is quite likely that the introduction of larger totals would result in smoothing out the differences even more completely.

In other words, notwithstanding the criticisms often made, it is very doubtful whether teachers try to attract students from other courses to their own by holding out the inducement of higher grades. The one making such a charge would likely very hotly resent an implication that he would do the same thing; giving us another example of the fact that we are more ready to impute integrity to ourselves than to others.

This study has bearing upon another problem, and might be considered with reference to it. Do students get better grades in subjects they like than in those they have to take? Not all who take required courses dislike them, for they may be in their chosen field; and not all who elect courses like them, for the field of choice may be limited.

But undoubtedly more required than elective courses are taken under compulsion, and more students like their elective than like their required work. But the study shows that the student does about as good work in courses he dislikes as in those he likes. Which is a factor for those advocating an 'education of interest' to ponder.

EDUCATIONAL PIONEERS—G. STANLEY HALL

By A. E. Winship

"The Confessions of a Psychologist," by G. Stanley Hall, is most fascinating. It is choice literature and a revelation of educational affairs in which he played an important part.

An autobiograpy like this has many appeals to the reading public. No one who cares to understand educational professional functioning of the years from 1883 to 1913 will fail to read this notable work. There is no other place to go for a vivid portraiture of progressive psychology in its American setting. Its interest is not limited to those thirty years but those were the vital years of his commanding influence.

Dr. Hall's mastery of the literature of Physiological Psychology in European countries, his acquaintance with the background of philosophical educational fountains and the variations that came through brilliant educational reformers from Comenius to Herbart, together with a passion for keeping ahead of the procession in thought and expression make his "Confessions" of surpassing interest.

There is no other personality among us now that could write as he writes. There is no trace of the conventional in his view of the passing from metaphysics to physiological psychology, and he has been able to avoid ultra individuality in the evolution of a rare psychological personality.

Dr. Hall was never a worshipper of leaders. He could not risk his reputation on a leader as Dr. William T. Harris did fatally on Hegel, nor as younger men almost jeopardized theirs on Herbart.

His was a progressive psychology in the sense that he was always making progress, and his "Confessions" are a moving-picture film for his thinking was always in action psychologically, expecially in the years in which he experienced ever changing personal and professional hope and fear.

Clark University will always be associated with Dr. Hall's professional functioning for it was in the early years there that he had his great influence; we can but feel that it was a tragedy that he stayed there after Mr. Clark got cranky, and especially after President Harper, of Chicago University, raided Dr. Hall's Faculty. We are not sure whether it was tragedy or comedy in the years when many aspiring youngsters sought fame by amateur pyrotechnic criticism which foolishly irritated Dr. Hall.

It was exceedingly unfortunate that Dr. Hall's fame as a State Association educational lecturer for some reasons experienced a "muffler" on his brilliant broad casting. We fear it was because he placed a price on his appearance which endangered a few Association treasuries and frightened other committees.

Personally he had a right to prefer to stay at home rather than go without unusual reward, but for the profession it was a calamity. American school people greatly needed to see and hear a man of his prestige with a message that no one else has ever had or will ever have.

For several years Dr. Hall's National Convention life was his glory. He was the only man in the educational arena who was never worsted by Dr. William T. Harris in a convention encounter. The superintendents in their midyear meeting came to expect a gladiatorial demonstration between Harris and Hall.

The most brilliant address we ever knew Stanley Hall to make was at

the Chicago meeting of the Department of Superintendence, of the National Education Association in 1909, I think. Dr. Harris had read an unusually prosy paper. His set papers were usually prosy to the non-philosophical listener. It was a very learned defense of Hegelianism, of metaphysics, of the traditional in education and, consequently, a subtle attack on biological and physiological assumed psychology.

There was no question but that Dr. Harris had Dr. Hall in mind all the time and when he ended his paper there was a general call from the audience "Hall, Hall, Hall!"

Dr. Hall rose and from his place on the floor rose to a great oratorical height in his glorification of the live child as contrasted with crystallized metaphysics, closing with the words of Jesus when he said "Suffer the little children to come unto me and *forbid them not, for such is the Kingdom of Heaven!*"

The effect was magical. But it soon suffered a dimmer, for Dr. Hall excused himself, saying that he was overdue elsewhere. I have never seen so disappointed an audience. There was, apparently, a feeling that Dr. Hall ran away from the rejoinder of Dr. Harris, who merely said that what he had intended to say was not in good taste in the absence of Dr. Hall. Then there was a general suspicion that even Dr. Harris had no come back to the spiritual uplift of Dr. Hall.

For some reason Dr. Harris and Dr. Hall never had occasion to have a battle royal in public, but shortly after that Dr. Harris was to speak to the superintendents of New England at the Boston Latin School and Dr. Hall came from Worcester to hear Dr. Harris whose address had no reference to any mooted question, and publicly all was as serene as a moonlight night on a placid lake. Assuming that I would be there Dr. Hall had written to say that he would especially like to see me at the close of the meeting.

When Dr. Hall and I stepped aside on a raised platform for our conference Dr. Harris joined us. I had recently reported in the *Journal of Education* an address that Dr. Hall had delivered in Boston and Dr. Harris asked Dr. Hall if my report represented what he had said and being assured that it was most satisfactory, Dr. Harris said that when he read my report he could have touched a burning torch to the fagots that would have burned Dr. Hall to the stake as a heretic for farming out the human brain—God's noblest creation—in cabbage patches, squash gardens and onion beds. It was the most brutally brilliant attack I ever heard Dr. Harris make, which is saying much.

Dr. Hall said Dr. Harris could not have been more distressed than he was when he read "Report of the Committee of Fifteen" of the National Education Association written by Dr. Harris. After the fur had been flying for several minutes both men said that I was the only man who could have heard that interchange of compliments. It was apparent that Dr. Harris had premeditated just such an opportunity and was "loaded" for it while Dr. Hall was unprepared and did not consider the occasion worthy a great effort. The honors of war were certainly with Dr. Harris.

That afternoon Dr. Harris came to my office and urged me to write out the passage at arms in my best form. When I insisted that it would not be fair to Dr. Hall, I had to promise Dr. Harris that I would write it out with great care that I might have it at hand if opportunity came for its use.

When James A. Page, principal of the Dwight School in Boston, was elected president of the Massachusetts Schoolmaster's Club he appealed to me to make a program for his opening meeting which should be a dazzling success. I proposed Larkin Denton and Dr. Harris, Professor Munsterberg

and Stanley Hall, and agreed to use all four addresses in the *Journal of Education* and then put them in a booklet. It was certainly a captivating program for which Mr. Page was exuberantly grateful until the day before the meeting when in anguish of soul he appeared with a furious letter from Munsterberg calling him several uncomplimentary names for not saying that Dr. Hall was also to speak, declining point blank to be present.

Dr. Harris was already in Boston and we went to Cambridge to see Munsterberg. What he said about Dr. Hall was not printable, all because Dr. Hall claimed to have been a physiological psychologist before the arrival of Munsterberg at Harvard. Said he would not sit on the same platform with him, that Hall was no gentleman, etc., etc. It was Friday afternoon and the meeting was the next day. When Dr. Harris and I left him he was as furious as ever, though we both gave bonds that Dr. Hall was a gentleman and would say nothing on the occasion to which he, Munsterberg, could object. The next morning before the meeting Dr. Harris called at the office to say that Dr. Munsterberg had decided to come.

Dr. Munsterberg's address was written and when he read it it was apparent that it was not his fear that Dr. Hall was no gentleman but that he knew that he, Munsterberg, was no gentleman for his paper was a savage attack on everything that Dr. Hall stood for. It was all too much for Stanley Hall who threw aside his notes and devoted himself to handling Dr. Munsterberg without gloves. All that Munsterberg had said of Hall's possibilities was justified and the bonds of Dr. Harris and myself were forfeited. I still have Munsterberg's letter, which came the next day, in which he called me a bunco steerer and several other equally pleasant names.

I am interested to see that Hugo Munsterberg's name does not appear in Stanley Hall's "Confessions." It has certainly been an interesting experience to know the psychologists who have been in the ring in the last fifty years.

My excuse for writing so freely of the author of "The Confessions of a Psychologist" is that I knew Stanley Hall earlier than any one now in the game, that I knew him in a way that no one else did in those days and that I have his consent to write in a purely personal vein.

Colonel Francis W. Parker and Stanley Hall came to Massachusetts in the same year, two men who played a large part in progressive education in the United States.

Parker came from Dayton, Ohio, to Quincy, Massachusetts, with the backing of Charles Francis Adams, second, and Hall came to Harvard as an instructor and student for his Doctorate of Philosophy. Both Parker and Hall had recently returned from Germany but the effect upon the two was radically different, but each had great influence on American education.

Parker cashed in on his German studies at once and never spent appreciable time in institutional studies thereafter, while Hall did no cashing in for several years and began by studying at Harvard. We can think of no other living American who has been as insistent and persistent a student of educational literature of all lands since 1875 as has he. It was our great good fortune to come into intimate acquaintance with Stanley Hall as soon as he came to Harvard. I was living in the Prospect Hill section of Somerville, little more than a mile from Harvard University, when he came to live with friends of ours who were home folk of his in the Berkshires, so that it was like his coming into our family circle.

To add to the human touch we had known intimately his brother whose home was in Cambridgeport, less than a mile away. The brother, who had just passed on, was a worshipful admirer of his scholarly brother so that I had been duly impressed with the honor and advantage of knowing

a man who had been a professor at Antioch College, Yellow Springs, Ohio, which Horace Mann had sanctified, who had studied in famous German Universities.

The Prospect Hill section of Somerville in 1875 was a residential district with a large population that had lived there only two or three years. They were mostly young professional men with more promise than performance. The coming of a man like Stanley Hall was a great event in a neighborhood like that.

Immediately an amateur professional club was formed with monthly meetings in a Boston hotel, and Hall was the most promising of the group. Not one of the men then had real promise of fame, but most of them became more or less famous. Perhaps the most famous, aside from Mr. Hall, was Carroll D. Wright, then in the Massachusetts Senate, was soon State Commissioner of Labor, then United States Secretary of Labor, and later President of Clark College, Worcester. Two of the members became judges one in Massachusetts, and one a Supreme Court Judge in Wisconsin, one physician became famous as an alienist and head of one of the greatest hospitals of New York City, and one became the leading railroad construction engineer of New England.

After two years in Harvard, Hall returned to Europe for further study, and I saw little of him after his return until he gave a course of lectures on Pedagogy, under the general influence of Harvard University. A miscarriage of plans which were supposed to have given him the Lowell Institute lectures was probably the reason why President Eliot had the University pay for the use of Wesleyan Hall, on Bromfield Street, Boston, and pay the printing bills. In introducing Dr. Hall at his first lecture President Eliot disclaimed any interest in professional pedagogy but said that since Mr. Hall, who had been a student of education in Germany, was impressed with the fact that a new day was dawning for education he was pleased to have the teachers have a chance to hear his lectures.

The price of the course tickets, as I recall, was $5.00, and the attendance was so great that Dr. Hall received something like $700 which in that day was a remarkable professional demonstration. At the time I was doing the educational and religious editorial work on the *Boston Evening Traveler*, of which paper I was later for a time editor-in-chief, and I lost no opportunity to boost and boom that famous lecture course. In 1886 I became editor of the *New England Journal of Education* and in the thirty-seven years since I have had much satisfaction in remembering the days when Stanley Hall was a neighborly friend, and though our activities have been along entirely different professional lines I have never failed to appreciate how much I have owed to his comradeship in those formative days.

I am probably justified in assuming that no one has enjoyed "The Confession of a Psychologist" in the same way that his comrade of forty-eight years ago has.

BOOK NOTES

Intelligenzprufungum und ihr Padagogischer Wert. By MICHAEL KESSELRING, Otto Nemnich, Verlag, Leipzig, 1923.

La Personnalité Humaine—son Analyse. By F. ACHILLE-DELMAS and MARCEL BOLL. Ernest Flammarion, Paris, 1923.

When one considers how loosely most books are named one is tempted to paraphrase Shakespeare to the effect that "a book by any other name would be just as poor a guide to its contents." Titles are convenient tags to order by but not to read by. One may find a safer sign post in the table of contents, especially when the book is of German or of French authorship, and a perusal of these two books prompts the reviewer to discuss them in one paper.

For both writers concern themselves with the growth of personality. Kesselring studies its nascent states while Achille-Delmas and Boll trace its evolutionary phases. Kesselring, however, confines himself to one aspect of individuallity, intelligence, without permitting himself—and the reader—to forget that the mental test does not probe the deeps of personality and that intelligence is not a simple element. He envisages intelligence both as a complex orientating itself towards the will and the emotions as a hierarchy of functions culminating in reasoning. Mental testers are too prone to ignore the affective-active aspects of intelligence and to over-emphasize the predictive value of composite group tests. True, Downey, Pressey and Kohs have attempted an objective evaluation of non-intelligence traits but the average teacher is insufficiently trained to employ tests that have not mechanized their adminstration. As to the validity of composite group tests,—a conception of intelligence is erroneous that views mind as a unit and employs tests that aim to resolve it into its component "faculties" of observation, memory, judgment, etc,; that recognizes its differential character yet tests the individual by "norms" and standards; and that regards abstract thinking as its highest manifestations and assigns a subordinate rôle to the reasoning tests. Kesselring seeks for corroborative evidence of intellectual vigor in the Observational Records, trained teacher's judgment and medical examination, and limits the testing program to a Definitions Test designed to evoke the logical powers of the examinee.

The information made available by these testing instruments but serve to fix the individual's pedagogical status. It does not map his educational destination; it does not harness up the complete personality to the intelligence. This co-operation is fostered by the *Gesamts padogogic* which lays under heavy requisition the treasure of culture morality and knowledge.

The Analytic-synthetic treatment of personality undertaken by Achille-Delmas and Boll leaves the student with a sense of the atomic nature of the ego. The innate personality and the acquired personality interact intimately and personality emerges as a product of the modifiable power that intelligence exerts upon innate dispositions, instincts and aptitudes.

According to the authors, the unfoldment of personality follows three stages: that of passivity, spontaneity, and reflection. Each stage has a psychostatic and a psychodynamic aspect in which dispositions and aptitudes, the atoms of the psychic life are broken up and reunited into various compounds through the active principles of psychic growth. Thus throughout the reflective state (*vie reflechie*) the proponderant disposition, activity, and the preponderant aptitude, reasoning, con-

ceived as static forces, react upon the environment precipitating therefrom judgment and abstractions that issue as acts which are highly flavored with sentiment.

The obvious advantages of such schematic representation of a highly abstract topic, need not blind one to its inherent faults. It helps to explain how the innate personality viewed as a duality of temperament and intelligence merges with the acquired personality. This union provides the individual with affective-active weapons of tastes and inclinations, memories and beliefs. Above all, it places proper emphasis on the accessory rôle played by intelligence; that memory, imagination, and reasoning, the three primary mental powers cannot cause personality to flower unless volitions and emotions are favorable to its growth. But this minute fractionalization of personality has betrayed the writers into subjecting the material to Procrustean treatment in order that the static and dynamic aspects appear as logically interconnected. We are still without dependable blue prints of the inner life of feelings and aspirations. To reduce the psychic life to a formula is to assume a naïve view of behavior.

Despite their shortcomings, these two books are noteworthy contributions to the growing movement to shift the emphasis from intelligence to personality. They point the way to a keener appreciation of the importance of instincts and "drives" in the evolution of individuality.

ALBERT J. LEVINE

The Accomplishment Ratio. By RAYMOND FRANZEN, Columbia University, N. Y.

It was the fashion to taunt Psychologists with the gibe that "psychology is a subject everybody knows, written in a language that nobody understands." To-day I. Q.'s and E. Q.'s are bandied about freely and statistics have obviated the difficulties inherent in technical language. School keeping is being robbed of its terrors and he who runs may read the secrets of child training. All the educational equipment one needs is tests, tables of norms, and formulae such as Dr. Franzen has worked out in his "The Accomplishment Ratio."

To resolve the perplexities of educators who found little correspondence between intelligence and school performance, Dr. Franzen has given us the Accomplishment Ratio. The I. Q. he argues only shows potential intelligence. This represents the intellectual capital of the pupil. We must know how wisely this capital is being invested in the schoolroom, what rate this investment is yielding. This information may be gleaned by means of the Accomplishment Ratio. But first we must find the Subject Age, say in Reading. How well does John read? Give him a standardized reading test. Find out how well he can read as compared with the performance of average children of his age. Now you have his Reading Age. Divide this by his chronological Age and you get his Subject Quotient. Now the final step. Divide this S. Q. by his I. Q. "We may call this," Dr. Franzen assures us, "the subject Ratio and the average of Subject Ratios (in Reading, Spelling, and Arithmetic) is the Accomplishment Ratio."

All of which computation, however, is more ingenious than scientific. Clothing a process in mathematical garb, does not make it mathematical. There are too many incalculable factors involved: the dependability of the tests, the reliability of the I. Q. and the validity of the Subject Quotient.

Binet's I. Q. has the merit of plausibility. Both mental and chronological growth have the same zero age-birth. But school age does not begin normally before six. There is then an interval of five years during which the child ages but acquires no organized school learning.

One might similarly devise an earning power age by averaging the wages of various age groups, find any person's Earning Power Age, divide it by

his chronological age and then fix his financial status in terms of an Economic Ratio.

Dr. Franzen is too sound a psychologist not to see the futility of compressing intelligence into a formula. Yet the statistical grind goes merrily on. We already have the Intelligence Quotient, the Accomplishment Ratio, the Promotional Quotient, the Prognostic Quotient and the Ethical Discrimination Quotient. We are promised a Character Quotient and a Social Quotient. Those who have not surrendered themselves to the lure of educational statistics may profit by the advice proferred a building radio fan. "Buy the cheapest outfit. New devices appear so fast that sets become back numbers overnight." ALBERT J. LEVINE.

The Days of a Man. By DAVID STARR JORDAN. 2 vols. New York, World Book Co., 1922, Vol. I, 710 p. Vol. II, 906 p.

These massive volumes constitute one of the fullest and most complete autobiographies ever written, and one of the marvels is that Dr. Jordan should be able to recall so minutely so many of the details of a long life, unless (and there is no indication of this) like Andrew D. White, he early began to take notes diary-wise with the purpose of sometime writing his own life. The pages are in open large type, the index most admirably and fully made, and the interest of the reader in the narrative is sustained with hardly a let-up from beginning to end.

Dr. Jordan's life has been one of extraordinary activity and usefulness, and that in three distinct fields, viz.: biology, education, and world peace, and in each of these he has accomplished enough to fill the life of any ordinary savant. His interest in natural history began very early in life, was distinctly fostered by home influences, and he achieved early success as an investigator and teacher, first in public schools and then in academic institutions, especially Cornell and Indiana, where he became President of the State University. His leadership of the Peace Movement in this country, where his influence outside academic halls was great, began later. How he managed to combine so many scientific excursions, lecture tours, visits to Europe, and special studies in the Balkan region with the creation of a University that seemed at the beginning to have vastly more funds at its disposal than any existing institution anywhere, is a marvel, but he seems withal to have had abundant time for the enjoyment of a most happy home life, so that it seems almost incredible that so much could have been crowded into the half century of his maturity.

Such a book will be read with interest, not only by all who care for Stanford University, but by those interested in the Peace Movement which has never had a more effective advocate. To the general reader outside these circles interest will perhaps centre about three points: (1) the early and difficult stages in the development of the University, and his relations to the Founders. Here he makes public for the first time very many data that were not generally known before. We did not know how near this splendid foundation, with its elaborate structure, came to the rocks in its early years, and what an amount of perplexing litigation and legislative action was necessary before it could read its title clear to the inheritance devised to it by its founder, or how many and loud-voiced were the early prophets of disaster. Only the greatest patience and sagacity combined to overcome all these difficulties, and made the institution the splendid success it has become under the influence of the rare sympathy, tact, insight and versatility of its first president.

Very wisely Dr. Jordan refrains from elaborating the Ross incident which created so much discussion at the time, and raised perhaps for the first time in an acute form issues of academic freedom which has so often been raised in academic circles since.

On his Peace activities, which is the third topic of great interest, the author contents himself with brief statements of his attitude, which, although criticized and misinterpreted at the time, do not differ essentially from those of most sane men when the excitment of war has passed.

The intense humanism of the book, the breadth and range of the author's interests, are everywhere evident. He is a poet at heart and has often written poetry of a high order, many samples of which are reproduced in these pages. Those who know him only at a distance will be gratified to find that he has not infrequently given us here in an epitomized form the substance of not a few of his books and more important articles.

Very few Americans have touched life at so many points, known so many people worth knowing, lent a hand to so many good causes, or, in fine, lived a life so worthy of being thus recorded.

Universe. By SCUDDER KLYCE. Winchester, Mass., 1921, 251 p.

This two-columned, quarto volume, which was not only written and published, but actually put in type by the author after many publishers had refused it, is almost stunning in its claims. It "solves all problems of why, how, and what in science, religion and philosophy," and David Starr Jordan, John Dewey and M. L. Cooke, who have all written prefaces, seem substantially to endorse the author's claims to these, we are told, our three conventional ways of expressing the same thing. In a sense it is more idealistic than Plato or orthodox theologians. The conservation of energy is true, but it is religion and not science. There is a mere verbal trick which enables us to complete and unify all knowledge and solve all problems, a trick we all use. All, even children, can understand this philosophy. Mathematics is only a shorthand language based on the same method or trick as ordinary speech. Language and logic are at bottom identical, and by understanding this trick we can solve all qualitative problems. "Philosophy is really the simplest subject there is." The first part is on the essentials of words, the second on matter, the third on men. Having developed his principles on a scientific basis he applies them to ethics, psychology and sociology.

Epistemologically everything is implicit in anything. The oneness of the universe and the discreetness of the most particular thing in it stand and fall together. Monism and pluralism both have their place, but sound reasoning and common sense depend upon seeing the relativity of each. Words are misleading because they name very special things or acts and lead us to ignore the relations of these to the whole, which is both the beginning and the end. All differences and even antitheses are relative and evolve from an underlying unity which is expressed in all things that are. The conscientiousness and rigor with which the author has sought to evolve his principles is worthy of all praise. If he is right the whole domain of knowledge and life is simplified, and the vast body of traditional methods and acquisitions can be junked.

The writer of this note is quite incompetent to pass judgment upon the soundness of the author's conclusions in most of the fields with which he deals, but does find his view helpful and illuminationg in his own department of psychology, and after long and continued efforts to follow his thoughts into outside domains with intellectual experiences in so doing which it would take too much space here to record, closes the book with a warm but welcome feeling, not only that the cosmos is one but that it is capable of being understood as a whole more easily and more completely than he had ever before thought to be the case. Vaihinger regarded science as really the simplest way of knowing nature. Perhaps this author will later be seen to have done for the three great domains of knowkedge a work

of simplification of as high pedagogic significance as H. G. Wells's epitome of all human history in two volumes has done.

Bergson and Education. By Olive A. Wheeler. London & New York, Longman's Green & Co. 1922, 130 p.

This little volume is a godsend to thoughtful teachers. It tells us in a concise and lucid way something of Bergson's personality, and gives us first a clear résumé of the high points of his philosophy, and then shows its application to current movements and education. We cannot know reality through the intellect, not even movement, but there is a higher intuition by way of intellectual sympathy. Mystics and poets have recognized but have not utilized this. But intellect selects from the vast number of impressions that come to us only those which are of service for action and neglects the rest. The only real thing in itself is change, and to know this we must get an inside view which really amounts to conversion. We can only grasp things flowing through time *sub specie durationis*, and to get within mobility is to find true duration, which has really nothing to do with clock time, but gives us quality and not quantity. We cannot think real time, but we can live it, because life surpasses intelligence. Even in knowing, self-consciousness only takes snapshots of reality and turns a dynamic flux into separate and static states. Only when we go deeper into ourselves do we find a unity of self and a flux of states. Determinists view everything from without and separate before and after. Only when we see life from within can we decide whether it is free or not. The function of the brain is to fix the mind on the material world which concerns action, but only a very little of what takes place in consciousness is translated into movement. Human consciousness at its deepest is creative mobility. An organism is a machine and an inventor, and the essence of life is in the movement that transmits it. Thus intuition reveals life as unceasing creation. We can at least momentarily become one with it. Intuition is instinct become conscious of itself. In man life has defeated automatism and achieved real freedom. Evolution is neither finished nor predetermined. Man can oppose one habit to another and so wins his fight for liberty against necessity; other species have been arrested. Laughter is a reprimand for social inelasticity, or to people and acts which resemble things rather than true persons. Thus his system complements modern science which is positivistic and would eliminate freedom. It never takes us to the bottom of things, but only tells us how to act on them. Thus he stresses freedom of man and life in the universe rather than law, so that we regard the world as a living, spiritual reality instead of a post-mortem dissection.

Now there is to-day a wide-spread revolt against mere intellectualism, and of this Bergson is one of the chief of the apostles. Knowledge is the servant not the master of life, which education often strangles. The author then proceeds to point out how the dynamic urge, which underlies evolution and is chiefly felt in man, may be developed rather than repressed as is now too often the case by education. She finds support for this view not only in psychoanalysis, but in Montessori, in life class teaching in certain British schools, and points out the need of a new conception of the school curriculum, for early in life all develop the germs of an at least unconscious philosophy. All religious training, e. g., must run parallel to the child's religious experiences, which it rarely does, and she tells us how to correct this evil. Every soul, especially the youthful one, has a remarkable power of intuiting, and it is this we need to inculcate by stimulating everything creative by a better use of the heuristic method commending the Play Way, the Dalcroze System of Rhythmic Movements, the Dalton Plan, the Cizek System at Vienna, Co-operative Study, Group Teaching, all of which encourage intuition and a better apprehension of

human evolution and relations, with more emphasis upon the inner changes in the mind of man and less upon outward events. But we cannot do justice to a book of such sagacity, so rich in detail that it must be read and inwardly digested.

The Social Philosophy of Instinct. By CHARLES CONANT JOSEY. New York, Charles Scribner's Sons, 1922. 274 p.

This book is an interesting and valuable contribution to educational and social theory, the important topics being historical orientation, instinct as a sanction, instinct and culture, and instinct in psychology. The author confutes the theory that "our behavior is determined not by the give and take relations existing between us and our environment, but by forces which we inherit as a result of the give and take relations our ancestors sustained to their environment." The innate prepotency of instinct he believes to be as untenable as was the far older conception that man was governed by external spiritual agencies without him. It assumes that time alone is necessary for the realization of a capacity. "Behavior is not the result of innate capacities, but of the influences that are brought to bear upon these capacities, and which are necessary to make capacities definite and effective." If the behavior of an individual is caused by the same conditions that aroused that behavior in our ancestors, there is no need to appeal to physiology; if not, we cannot understand how the behavior of our remote ancestors under one set of conditions can be used as an explanation of behavior under another set of conditions. He thinks the strong, popular regard for the instinctive has been both excessive and misleading. It is not enough to allow instincts a free and untrammeled expression, and there are many acts which cannot be justified by showing that they are expressions of instinct which has many traits in common with the higher animals, nor are all evils due to the thwarting of innate impulses. This leads to an under-estimation of the duties of the individual to society and the State. "Man does not inherit a mass of impulses as the result of the experiences of his ancestors:" but they must be interpreted only in terms of the varying relations that obtain between the individual and his environment. Institutions and culture are not to be interpreted as expressions or liberations of instinct, or of original nature, but they are the responses which the latter make when confronted with certain conditions. This the author believes is even true of sex life, as he tries to show at some length apropos of Freud.

Readings in General Psychology. By EDWARD S. and FLORENCE R. ROBINSON. University of Chicago Press, 1923. 674 p.

This book is a godsend to the teacher, and is based on the sound belief that the beginner needs to read far more material than that generally assigned. There are quotations from scores of mostly modern psychologists, and these are arranged in the following chapters: (1) problems, general features of nerve action, nervous structure, reflex action and instinct, habit, sensation, the different senses, attention, perception, imagery and association, memory, imagination and dreams, language, thinking, feeling, emotion, control of action, personality, individual differences and measurements, work, rest and sleep.

The competent and thorough use of a book like this would certainly go far to give the student the breadth of view and the insight into different theories which he very greatly needs.

The Unconscious: An Introduction to Freudian Psychology. By ISRAEL LEVINE. New York, Macmillan Co., 1923. 215 p.

The author of this book concludes that psychoanalysis as represented

by Freud is "indispensable at present to the science of psychology," although he confines himself rather strictly, as the title indicates, to the justification of the unconscious. In Part I, on the unconscious before Freud, he treats Leibnitz, Schopenhauer, Hartmann, Nietszche and others, and, as cannot be said of the thoroughgoing Freudians, does abundant justice to their contributions to the subject, although he considers that Freud made an epoch by introducing scientific treatment of the subject. After establishing the validity of the unconscious and its setting, he discusses in the last part its significance for education, the crowd, personality, ethics, æsthetics and philosophy. Within its field it is by far the best of all the many Introductions to Psychoanalysis that have yet appeared, and the author's moderation, lucidity, insight and breadth of view make his volume one of exceeding interest and helpfulness, not merely to psychologists, but to the ever-widening public that is now interested in this field.

Internationale Zeitschrift für Individualpsychologie. Edited by ALFRED ADLER. Vol. II, No. 1. Vienna, 1923.

All students of education, psychology and psychotherapy will be glad to see that the publication of this Journal after years of suspension during the war is now resumed. The *piece de resistance* by Adler himself is a survey of recent progress in individual psychology. Other articles are the unity as idea and experience, an English article on the relation of psychology to education by Y. E. Winslow of San Francisco, another article on the psychology of nervous and cyclothymic fluctuations of mood—the longest article—the man in *Schonherrs Weibsteufel* (Woman devil), neurotic mysticism, the nervous child, reviews, and reports of meetings. Each German article is followed by a brief epitome of its contents in English. The list of co-operative writers of permanent *mitarbeiter* is a long and very impressive one. We bespeak for this Journal a wide American clientéle.

Benign Stupors: A Study of New Manic-Depressive Reaction Type. By AUGUST HOCH. New York, Macmillan Co., 1921. 284 p.

Dr. MacCurdy has done a real service by publishing these papers of the late Dr. Hoch, based upon his studies as Director of the Psychiatric Institute and the New York State Hospitals. Each of its fifteen chapters are marked by the author's characteristic thoroughness and objectivity, and are enriched and illustrated by clinical cases. It makes a volume which no one interested in psychology, abnormal or even normal, can afford to be without. The author's views are perhaps best summed up in Chapter 10, where he characterizes half a dozen stages of stupor from a state which might be called psychic death, which is akin to the mentality of the new-born infant, up to normality. The patient, failing to respond to the normal stimuli of life, becomes introvertive, and his activities grow more and more larval, and he or she very often actually broods on death. Life is so unsatisfactory that initiative is lost, there is an unusual tendency to accept other people's ideas, indifference and even catalepsy may supervene, and the regression may go back to something like dreamless sleep. This descent Nirvanaward may be broken by episodes of anxiety or flashes of lucidity, but in general the patient becomes too absorbed in his own inner processes to be roused. The author is very acute in distinguishing pure stupor from melancholic depression. catalepsy, dementia præcox and so forth.

His Religion and Hers. By CHARLOTTE PERKINS GILMAN. New York, The Century Co., 1923. 300 p.

In the recorded history of the race man has been predominantly interested in practical outside affairs, in Subduing nature, and no less so in his interest in death and the life beyond. His interpretation of religion has focussed on saving his soul in another world. Woman, on the other hand, has been subjected, and although she represents in a larger way than man the interests of the race and is a more rounded specimen of it, she has been led by the necessities of motherhood and her inclinations, and also by her subjection to man, to restrict her interests to domestic duties and to the breeding and rearing of children. The result of this is that her interests in the future are more limited to this world and its future, and she is thus less *detraque* from fundamental life questions than man. Moreover, the double standard which has required chastity of her and permitted more or less promiscuity in man contributed to the subordination of her sex. But this condition is drawing to a close. Woman will never come into her rights until there is (a) one standard for men and women which must be secured even if somewhat more license is given to woman than our modern ethics now enforce, and (b) until the fundamental principle is recognized that woman is not to be regarded by man as a sexual object, and these relations even within marriage must be reconstructed giving a woman complete control over her own body, and allowing the decision with regard to the bearing of children to rest with her.

This is the fundamental thesis of this book which is written in the attractive and forceful style characteristic of the author, although not without some repetitions. Her ideas are not always presented in the most systematic way. She criticizes the feminist movement as not going far enough in the above directions, and insists that until these goals are made dominant, woman cannot assume her rightful place in modern life. In her limited knowledge of biology the author lays great stress upon those primitive forms of life in which the male is only a parasite, and has little or no function save that of procreation, and she seems to think that the male dominance of which she complains in modern men is a perversion of nature's plan.

As a whole the book is very attractively written, and may justly be called a real contribution to the subject, and one which should be read by all interested in it, but especially, we think, by all modern feminists.

Primitive Mentality. By LUCIEN LEVY-BRUHL. Tr. by LILIAN A. CLARE. New York, The Macmillan Co., 1923. 458 p.

This book, like those which have preceded it by the same author, is simply crammed with carefully selected and pertinent facts. He discusses the primitive's indifference to secondary causes, mystic and invisible forces, dreams, omens, divination, ordeals, mystic meaning of accidents and misfortunes, of causes of success, of the white man and his affairs, and weighs his dislike of the unknown and his attitude toward European remedies. Thus, the range of topics, wide as it is, is concerned mainly with magic in its wider sense, and neglects the many other features of primitive mentality. His book is certainly the latest word, however, and in our judgment, the best in this field. He has utilized more than any previous writer data that have come from missionaries and, to some extent, from physicians. Such facts as he gives enables us to understand better than ever before the process of the savage mind, which he calls participation in things in which he is interested, and a process which he perhaps less happily calls "prelogical." In fact the savage can reason well and soundly, and it is his premises rather than his processes that differ from our own mentation.

This book is not only a signal contribution which experts will find marks distinct progress in this field, but it is so lucid and so well translated that it will interest if not fascinate the general reader.

A. B. C. de Psychologie. By ARMAND CUVILLIER. Paris, Librairies Delagrave, 1923, 160 p.

This is one of the most comprehensive yet condensed and pedagogic primers of psychology that have yet appeared. There is no trace of the influence of any of the schools of psychology which have obtruded their distinctions in American textbooks, although the influence of Comté upon the author's idea of the relations of this psychology to sociology and Bergson's idea of the relations of this psychology to sociology and Bergson's *fonction du reel* are quite in evidence. Beginning with the stream of thought the unconscious elements are noted in reverie and dreams, hypnotism, and so forth. The contributions by students of animals, children and anthropologists are given due place. Sensation, and especially memory and aphasia are touched upon, and the author then passes to the idea of consciousness, duality, affectivity, will, reason, judgment, education, including that of defectives, speech, personality and freedom. The style is lucid, the illustrations well chosen, and it is a book that really should be put into English.

Introduction a la Psychologie. L'Instinct et l'Emotion. By J. LARGUIER DES BANCELS. Paris, Payot, 1921. 286 p.

This introducation, although it deals only with instinct and emotion which the author, with sound pedagogic tact, places first, begins by describing the object and methods of psychology, and its divisions and definitions. The second chapter is devoted to the relations between the soul and the body, the psychic fluid, the cerebral doctrine, Gall and Flourens. The third discusses consciousness and the nervous system, the brain and its psychic activity, parallelism, memory and image. The fourth is on the spinal cord and the brain, the lower vertebrates, reptiles, birds,mammals, the function of the cortex and striate body, and the relations between intelligence and the brain. Fifth, reflexes and cerebral action, the reflexes of defence, those of a higher nature, locomotive reactions, the cerebral apparatus and its plasticity, habit and localization in vertebrates. Sixth, instinct, its relations to reflexes, its decay, the kinds of instinct (primitive and derived), the analysis of sentiments at play of human instincts. These are eight in number: alimentary, defence, curiosity, sex, parental, social, egoistic and play. The last chapter deals with emotions, their relations to instinct, the disorders of the latter, the theories and mechanism of emotions, their relations to consciousness, pleasure and pain, *douleur*, theories of the sentiments.

La Medecine psychologique. By PIERRE JANET. Paris, Ernest Flammarion, Editeur, 1923. 286 p.

It is of great interest that this French psychologist, who nearly a quarter of a century ago loomed so large but in recent years has had so little of importance to say, here embodies his general conclusions and attitudes toward the whole field of medical psychology in a little handbook which can be literally read through in a day. Like ancient Gaul it is divided into three parts. The first entitled evolution of psychotherapy deals with miracles and animal magnetism, Christian Science, hypnotic suggestion, æsthesiogenics, liquidation of traumatic souvenirs, and psychoanalysis. The third chapter treats of the therapeutic issues of religious practices, under which he includes isolation, re-education, medical moralization,

and treatments by faith and by work. Fourth, psycho-physiological treatments, including visceral theories of neurosis, and indirect psychological treatments and rest cures. In Part II, under Principles, he treats (1) moral action, the inadequacy of observation, the real efficacy of general psychotherapy, inexact interpretations, and the energy of *l'esprit*. (2). The utilization of automatism, the mechanism of suggestion, the changes of psychological states, the automatic functioning of tendencies, the power of automatism. (3). Psychological economies, the problem of exhaustion, psychic defences, the fear of action and complete rest, economy by isolation, economy in liquidation, economy in directions and in therapeutic diversities. (4). Psychological acquisitions, the acquisition of new tendencies, augmentation of forces, three principles of excitation, excitations in psychotherapies. In Part III, under applications, he includes (1) psychotherapeutic diagnostics, treatment of functional deviations, treatment of psychic exhaustion, treatment of psychological hypnotonics, and (2) psychotherapy.

Le Cerveau et la Pensée. By Henri Piéron. Paris, Librairie Felix Alcan, 1923. 326 p.

This little handbook deals in the first part with the general conception of neuro-mental functioning and of the problem of localization. Part II deals with the receptive and incito-motor functions and the senses. Part III with the verbal function and its relations to thought, or the cerebro-mechanism of language and aphasia; while the fourth part deals with the regulation of the affective psychic life, its rôle and its mechanism.

Mental Tests and the Classroom Teacher. By Virgil E. Dickson. New York, World Book Co., 1923. 231 p.

In this volume, which is one of the measurement and adjustment series, edited by Professor M. L. Terman, the Editor tells us that the testing movement now sweeping the world "is much less fruitful of practical results than it ought to be," and that the merit of this book is that "it interprets this movement in terms of everyday classroom practice," that the author has an experience which "has probably been more extensive than that of any other living educator." This, if justified, when we think of Terman himself, of Goddard, Burt and Thorndike, is certainly high praise. Dickson seeks to show that the "differentiation of curricula and the classification of school children according to ability, far from being undemocratic measures, are absolutely essential if the public school is to be made a real instrument of democracy," because the latter "does not rest upon equality of endowment, but upon equality of opportunity." The first chapter is on significant trends in American education. Then follow chapters on the grading problem, what tests are, their use as a basis of classification, who will succeed in school, tests in the kindergarten and primary grades, in the intermediate and upper grades, tests and the inferior and superior child, tests and guidance in high school, training teachers for practical testing, tests and the school principle, tests of necessity in modern school program.

Measurement in Higher Education. By Ben D. Wood. New York, World Book Co., 1923. 337 p.

This book is in a measurement and adjustment series edited by M. L. Terman, who contributes an eleven-page introduction, in which he says that American education is most conservative at the top so far as innovations are concerned. He tells us that Wood has here given us a vital treatment of the entire measurement problem so far as it concerns higher education, and thus the publication of this volume will prove as real

an influence in the wider field as Flexner's report on the more limited field of medical education. Nothing but statistics can take us beyond the limit of personal opinion and individual bias. The value of work like this does "not hinge on the assumption that intelligence can be measured with perfect accuracy, or that the psychology of intelligence is thoroughly understood," and the author even says that personal opinion as to what intelligence is or is not may be left out of the question althogether—a statement which seems to the writer extremely questionable. The author thinks it sufficient if intelligence tests give us some data for the prediction of an individual's probable success later in certain kinds of intellectual work. He wants an index of average mental ability in different colleges, which he thinks would vary greatly,"for some student bodies are made up largely of intellectual cream, while others have drawn almost entirely from the lower levels." Of two professors teaching the same subject, one may attract bright, and the other mainly inferior students. As long as raw material is an unknown quantity the merits of the profession must also remain unknown. "Except in certain types of courses it is probable that scholastic success depends far more on native ability than upon the extent and kind of previous training." A college is justified "In permitting the exceptionally able candidate, who is short in some of the usual academic requirements, to enter by the test route." Universities will sometime cease their present useless attempts to drive the tortoise and the hare abreast.

The chapters in this book are as follows: the Columbia experiment; description of the Thorndike examination, its validity and analysis; college success; some principles of measurement experiment with a new method of content examination; the new type examination in physics, in government, zoology and in other subjects, with an appendix on various points concerning the Thorndike examination.

Of What Use are the Common People? By HEINRICH E. BUCHHOLZ. Baltimore, Warwick & York, Inc., 1923. 251 p.

The seventeen chapters of this book, although constituting a more or less coherent whole, might have been written as a series of magazine, or even Sunday Supplement, articles, as regards style. The common people are in the saddle. Even the young feel that they have been duped by their elders. The common people are now divided into all kinds of groups, each clamorous for its own interests. Pooling of interests is a very different thing from a community of them. It is a question then of the balance of interests, so that none become supreme. The author would introduce the idea of the family which he makes basal everywhere. Here father, mother, son, daughter may be temperamentally ever so different and so may their interests, but harmony and unity prevail. Each is a part of the whole, and none stands on his rights against all the rest. This ideal he applies to the body politic. He shows that there can be no separate classes, e. g., that the middle class at the bottom shades into the proletarian below and the aristocrat above by insensible grades. He finds little to praise in constitutional majorities; the mutinous minorities are far more liable to be right. So, too, normality shades in the same way from the sub- to the super-normal, and democracy will never permit a special training for those of superior gifts. Indeed, the author seems to rank the latter as he does wealth or inherited titles. No nation has attained to pure democracy where the authority is not vested in all the people. Female suffrage has helped, but only a little. The total vote, if it is all called out, is much less than 20% of the entire population. The majority is thus a still smaller fraction of the whole. The full vote that elected Roosevelt was only fifteen million.

As to education, he holds that the essentials necessary for citizenship can really be taught to average, if not sub-average, minds. A group of mugwumps deny that quart courses should be given to half-pint minds, while he thinks that they profit by a very slight expenditure of knowledge that seems far beyond them. As it is our educational system makes mugwumps. Commonplace attitudes and judgments, too, are important; the judgments of the wisest are very fallible as history abundantly testifies. In music and fine arts the tastes of the masses and of the experts are very far apart, but the former have their justifications. Manners are mostly hypocritical modes of concealing real sentiments, and really do disguise human nature, so that the lowest classes who scorn manners know man-soul best.

Philosophy has the severest castigation of all. It is made up of abstractions that are utterly barren and useless, in fact incomprehensible not only to the people but to those who affect them. No intellectuals are so hard-boiled aristocrats at heart and so useless. The upper classes, however, do not reproduce their kind and the masses do, and out of the swarms they bring into being there is a better chance of finding leaders than among the few of the so-called upper classes. Moreover, the masses can follow their leaders with a certain loyalty which is always necessary for organization. Thus he answers the question which constitutes the title of his book, by finding in the common people the only hope of the salvation of the world.

The Nature of 'Intelligence' and the Principles of Cognition. By C. SPEARMAN. London, Macmillan Company, 1923. 358 p.

This volume is divided into three parts: (1) historical and critical, (2) constructive, which is the largest with fourteen chapters, (3) applicative. The story of the development of tests and the trenchant criticism of them, especially of the utter failure to date to reach any uniformity of either definition or opinion as to what intelligence really is, is worthy of all praise and has never been so well done.

In Part II the author delves into subtle problems of epistemology; the apprehension of experience; the eduction of relations; the varieties of relational educing; the eduction of correlates; some special cases of eduction, e. g., cause, objectivity, attribution, and various constitutive relations, language, interpretation of pictures; quantitative problems; reproduction and correlative eduction, clearness, thought and sentience; a great illusion; experiments in objectivity; perception and movement; the intellect and conception, judgment and reasoning; memory; and imagination. Holding, despite his criticism of testing to date, that we have here the dawn of a new and perhaps the only scientific psychology, he deduces in the final chapter certain intimations of what that psychology is to be, for at present it is only the hope of a science. He concludes that it is based on three fundamental cognitive principles: (1) any lived experience tends to evoke immediately a knowing of its direct attributes and its experiencer; (2) the perceiving of any two or more characters tends to evoke immediately a knowing of relation between them; and the third principle, founded on these, is—the presenting of any character together with a relation tends to evoke immediately the knowing of some correlative character. Subordinate principles which follow are (a) every mind tends to keep its total, simultaneous, cognitive output constant in quantity, however varying in quality, (b) the occurrence of any cognitive event produces a tendency for it to recur afterwards, (c) and produces a tendency opposite to its recurring afterwards. The intensity of cognition can be controlled by conation. The anogenetic process involves (1) reproduction, (2) disparition, (3) some variation in clearness. As for compound opera-

tions, the chief types involve (1) a sentient basis, (2) a co-ordinate diffusion, (3) multiple levels, (4) eduction blended with reproduction. Instead of rejecting the word 'intelligence' or restoring it to its ancient status as cognate to intellect, he prefers to extend its range to cover all three noegenetic principles in all their manifestations. These are the real foundations of psychology, and by their development it will be able to take its place beside the older physical sciences, and the two halves of psychology so long cleft in twain may now, like Plato's man-woman, grow together. The author here sums up the work of twenty years and practically rejects all previous psychologies as unscientific. He may be called a prophet of the testers, but his conclusions, although based on so much work and such strenuous thinking, are so at variance with methods, aims, material and even nomenclature of current psychology, that we cannot believe that this bold attempt at a new dispensation can be successful. If even the testers, to whom it is chiefly addressed, accept it, it will involve a radical change in their current conceptions, methods, and goals.

A History of the Association Psychology. By HOWARD C. WARREN. New York, Charles Scribner's Sons, 1921. 328 p.

This is a sympathetic story of the rise and development of associationism beginning with the origin of the dream and the idea, and tracing its inception back not only to Hume but to Plato, following it through Hartley, the Mills, evolutionary associationism, Spencer, and Lewes, with an interesting chapter summarizing the English associationists, and then passing to those on the Continent, beginning with Condillac. The experimental studies of associationism are given a special chapter, and after treating of the nature and laws of association in general the author concludes with the association analysis of mental states, and closes with a bibliography and a chronological chart.

There is an admirable inclusiveness in this work, and one will find at least a paragraph devoted to about all the important studies made in this field up to date.

Statistical Method. By TRUMAN L. KELLEY. New York, Macmillan Company, 1923. 390 p.

This book is designed to serve two needs, that of biologists, economists, educators and psychologists who know a little of higher mathematics, and perhaps care less, but use statistical methods merely as a device to portray the effects in their field, and, secondly, of those in the same field who use mathematics as an aid to the discovery of new truth. The needs in all four fields of the first group are the same, and the author seeks to meet these needs and to provide a foundation which will serve for advanced work in any of them. The approach of principles is developed through concrete problems, save where simplicity of problems or limits of space dictate otherwise. The author depends largely upon Carl Pearson and his co-workers, and the notation follows that of the English school. He has to know the sheer visual weight of symbols, so appealing to the tyro, but this is reduced by a few new symbols, especially in connection with the multiple correlation. He does not believe in using a measure whose probable error cannot be calculated. The main chapters are the tabulation and plotting of series, graphic methods, measurement of central tendencies, of dispersion, normal probability distribution, comparable measures, the fitting of curves to distributions, measurement of relations, functions involving correlated measures, further methods of measuring relationship, multiple correlation, statistical treatment of sundry special problems, index numbers, and in an appendix we have a list of important symbols,

the Greek alphabet, bibliography, and the Kinley-Wood table of the normal probability principle with an alignment chart.

This book fills a real need, and will be of special aid to all psychologists and teachers making mental measurements.

The Contact between Minds. By C. Delisle Burns. London, Macmillan Company, 1923. 138 p.

This book attempts to determine the character of only one element in reality, namely the relation between minds, which is referred to in common speech as communication or co-operation. Even this relation is not here analyzed psychologically, for the object here is philosophy or metaphysics. When we speak of real weight or size we use a standard that implies communication of minds, but this does not suffice as evidence for its psychological character. Because communication has not been exactly placed, Leibnitz and others have said that monads have no windows, and Hegelians that there is only one mind; but this is a misleading view of communication. The explanation, the sense data or illusions, values or ideals, depend upon the character of communication. The theory here is metaphysical hypothesis or a "first vintage" to be used by future students. In all contacts between minds there results a "certain enjoyment" and a sense of unity, which indeed is implied in all relations whether conative, noetic or æsthetic. This kind of contact is more than that mediated by the body and from it springs countless individualizations, and when these are developed other enjoyments, but of a lower kind, arise. Hence, there is a sense in which, to put it in psychological terms, the general precedes the special so that we have here to some extent a close reminder of Schopenhauer's famous essay on Individuation. This booklet has a fine and closely woven texture of thought which will be welcome to sociologists, especially those of the Durkheim persuasion; and despite the author's disclaimer we should prefer to call the book not metaphysical but a contribution to the higher psychology of society.

Man's Prehistoric Past. By Harris Hawthorne Wilder. New York, Macmillan Company, 1923. 463 p.

This compact and admirable volume with its 111 illustrations is by far the best (as indeed the latest should be) text that is designed to interest the student in the early history of mankind. Indeed it does for the full story of prehistoric man what Osborne's larger book attempted to do for the man of the old stone age. After an introductory chapter on the chronology of prehistory, the author in successive chapters takes up (2) material and method, (3) European prehistory, (4) the prehistory of Africa, Asia and the Oceanic, (5) the prehistory of the two Americas, and (6) the known types of primitive man. The author even gives us a very valuable, if necessarily more or less conjectural, chronological table of the divisions of European prehistory. There is perhaps no field of science in which such a vast body of material exists and which it is so difficult to co-ordinate, to find chronological sequences, and to bring into anything like a coherent unity; but the layman and the expert alike can have only commendation for the boldness, sagacity, and pedagogical effectiveness in doing just this, as shown by our author.

A human touch is given to the book by the author's description of how the great finds, all the way from the Neandertal man to Cook's famous tooth, were found, and by his method of giving in order the chronological finds belonging to the general types, Neandertal, Cro-Magnon and so forth. No one can follow this record without a profound conviction that man has left enough fragments of his own prehistory to enable the paleon-

tologist to reconstruct the successive stages of his evolution, and, if not to make a bridge from the pithecoid to the human stages, to establish at least a series of stepping-stones which do show the lines along which this development was made, and to fortify the hope that, as in the case of so many animal pedigrees, man will soon be able to read his title clear to primordial apehood and realize that he is no upstart, but that his line of ascent goes back unbroken to the very dawn of life.

Nature and Human Nature. By HARTLEY BURR ALEXANDER. Chicago and London, The Open Court Publishing Co., 1923. 529 p.

This volume consists of fourteen chapters, all but the first and last of which have appeared elsewhere, and which set forth the *Weltanschaung*, which is both consistent and inspired. The chief chapters are philosophy, religion and race progress, evolutions of ideals, truth and nature, the greatness and beauty of truth, beauty and pain, wrath and ruth, human personality, the scientific Bergson, a definition of nature, Plato's conception of the cosmos, music and poetry, the philosophy of tragedy, art and democracy, Hebraism as a mode of philosophy, and *Apologia pro fide.* One should read this last chapter first, for it summarizes the author's views in a most eloquent and persuasive way. He tells us that, although the son of a clergyman, he has all his life had almost nothing to do with the church or its institutions, but believes in Christianity as he understands it as embodying the central truth and higher meaning of life. Nature to him is not a dead mechanism but palpitatingly alive with purpose, and this means that it is a manifestation of the living God; while human nature, which sprang out of the heart of physical nature, is a kind of second dispensation of the divine. Christianity for him is not monistic but dualistic; the powers of good and evil, truth and falsehood, are everywhere in conflict, and this we see in nature as well as in human life. He believes in an intuition that is deeper and more reliable than reason which is affirmative, creative, and is the *credo* as distinct from the *intelligo.* There is to the philosophic mind a faith that is above reason. The passion is the eternal symbol of human life. Over and above all needs, forms and all the phrases that theology has so elaborated, there is a wealth of significant meaning, insight and truth which embody higher values, seen by mystics, but which are nowhere yet adequately expressed. The author is, however, a futurist because he believes that on the whole, despite the powers of evil and darkness, the world is slowly moving toward a higher goal.

Old age, its cause, with a remedy and preventive. By VIRGINIA MAY BROWN Washington, D. C., Gibson Bros., 1923. 135 p.

This author, basing largely on Sanford Bennett's story of his extraordinary rejuvenation after the age of 70 by exercises taken in the horizontal position, goes still farther and advocates the thesis that gravity draws the blood downward, and in old age tends to stagnate in the intestinal tract and to produce gout and varicosities, etc., especially in the lower limbs. Old age is largely due to imperfect circulation in the head and brain, which thus suffers slow atrophy and makes the eyes and ears dull, the teeth decay, and the larynx and voice to grow weak. If we exercise in the horizontal position, raise the foot of our beds, so that the head is a little lower than the foot, and especially if we can elevate the feet, as Americans so tend to do, and best of all if we can learn to turn somersaults or stand on the head, the life-giving blood distends the arteries and prevents their hardening and irrigates and vitalizes not only the head and all its parts and functions, but the neck and the upper part of the lungs where disease so often begins. The author bolsters up her thesis by many quotations from physiologists and others

and by abundant testimonials by people who claim to have been helped or partially rejuvenated by this cure.

Birth Statistics: for the birth registration area of the United States. 1921. Seventh annual report. Washington, Government Printing Office, 1923. 269 p.

In 1915, when birth registration really began in this country, reliable statistics were found only in the New England States, New York, Pennsylvania, Wisconsin, and Minnesota. In 1921 the area of authentic registration covered nearly half our territory and 82.2 per cent of the population or twenty-seven States. In 1921 the birth rate was 24.3 per thousand, a very slight increase over the preceding year, although up to 1919 there was a slight decrease. There is always an excess of live male births over those of females, a point which many theories, none of them too well established, have sought to explain. The percentage of births in rural is slightly greater than that in urban communities.

These statistics are very detailed and significant, but such data have not been kept long enough in this country to show in any large way whether fecundity here is increasing or decreasing.

International Clinics. Vol. II, 33rd Series. Philadelphia and London, J. B. Lippincott Co., 1923. 304 p.

This volume contains four papers on Insulin, eleven upon diagnosis and treatment and eight on surgery. Of special psychological interest is a paper by T. V. Moore on the pathology of will and voluntary action. The general conclusion is that thinking about a movement causes a change in the Rolandic areas which results in vascular reflexes involving a change of blood pressure, which causes many sensations which are factors in the feeling of innovation that produces or accompanies muscular contraction.

Tragedies of Sex. By FRANK WEDEKIND. Tr. by SAMUEL A. ELIOT. New York, Boni & Liveright, 3rd edition, 1923. 347 p.

These four plays selected for translation from among many more seem to give more or less justification to the translator's claim that although the author dealt of sex with unprecedented frankness, there was always a moral and a good one in sight at the end. This perhaps is best seen in "Spring's Awakening" where a very young boy and girl fall into a disastrous intimacy, as the result of which the girl dies in giving birth to a child, and the moral is that parents should give their children a little instruction betimes in this field. This is true of the other plays, even in "Damnation" in which a frigid, middle-aged woman crusader against the White Slave Traffic, meets an old and hardened male reprobate who had devoted himself to it; she is brought to the point first of begging him to marry her, then to sell her, and finally both of them are brought to see the error of their ways, he by remorse which leads him to suicide, and she by more self-knowledge.

The marvellous vogue which Wedekind has had in German theatres since his death, four years ago, is in most marked contrast with the way in which he is regarded in this country. Whatever we may say about the evil results of such play writing for the young, we must admit that the author had a deep insight into what is perhaps the darkest side of human nature, and really tried to better it.

Casanova's Homecoming. By ARTHUR SCHNITZLER. New York, Thomas Seltzer & Son, 1923. 201 p.

We have here an imaginary completion of Casanova's Memoirs written

in the style of the eighteenth century, and describing Casanova's last amour when he was verging on old age. Schnitzler has certainly here got not only the spirit of the man and his century, but his narrative conforms with astonishing fidelity to the Freudian rubrics. It is saturated with sensuality and is frank in a way that suggests Boccaccio. There is, however, a virility about these amours, which, despite their frankness, suggests that most contemporary writers who deal with the *risque* and even the salacious are depicted in a kind of falsetto evirated form. The story of a man who buys from a lover the privilege of impersonating him for a night with a girl who is a prodigy of erudition and apparent frigidity, who discovers himself to her in the morning as a shrivelled old man, and on escaping from her chamber slays her real lover in a duel in which both are nude, is not a story for the young, and perhaps we ought to add for any save the psychologist, but for him the book has a unique interest.

Black Oxen. By GERTRUDE ATHERTON. New York, Boni & Swenght, 1923. 346 p.

This story is told in the author's most engaging style. It is of a young woman with marvelous charm, who is habitually seen at rehearsals and first nights in New York theatres. She is evidently very wealthy but no one knows her and she does not seek associates, so that there is much mystery and gossip. An old first nighter detects in her a marvelous resemblance to a famous beauty and actress of a generation ago, and the theory even gains vogue that she must be her daughter. She is thus thought to be the illegitimate child of a very famous mother. A young and brilliant columnist with remarkable charm, but who had resisted all feminine blandishments, falls desperately in love with her, and after a good deal of reservation she reciprocates his affection. Most of her life had been passed in Europe when she was singularly familiar with all the great personages of European courts, especially versed in European politics, and her sagacity and wisdom were nothing less than amazing in one so young. In the sequel it transpired that she was her putative mother rejuvenated by, and herself a marvel of rejuvenation, by X-rays and glandular transplantation. This secret is for some time kept from her lover, but he is finally told all, undergoes intense psychic struggles, is greatly tempted to give her up as the secret is becoming known more and more to a larger circle but cannot break away and is finally engaged to her and their marriage draws near, when a very distinguished and rather aged European diplomatist visits this country, who in long years past, before the rejuvenation, had been her lover. The columnist is intensely jealous, but finally she breaks with him and in the end goes off with her old friend.

The statements made about the process of rejuvenation are pretty wide of the mark and the rejuvenation is far and away beyond the dreams of the enthusiastic endocrinologists. Here the writer is as brief and ignorant of the scientific aspect of her theme as the author of "Fielding Sargent" is informed and competent. Two episodes that rather disfigure the book and which are if possible more extravagant, are the flapper who follows, hates, and insistently proposes marriage to the columnist, and the old man at the dangerous age who is a victim of an erotomania which is expressed in terms that come pretty near exposing the book to the condemnation of purity leagues. These, especially the latter, seem to the present writer excrescences and which had better in the interests of, we will not say propriety but truth, to life should have been omitted.

Story of the Typewriter 1873-1923. By the Herkimer County Historical Society. New York, 1923. 142 p.

This is a story compiled on the fiftieth anniversary of the invention

of the writing machine, which describes with ample illustrations the early forms of the typewriter, the efforts to secure a market, its final launching, its agency in achieving economic independence for women, and its most modern form. It exists now for no less than eighty-four different languages.

The last number of *Metron* contains a very interesting study of the United States Senate by Arthur Macdonald, with one large and many smaller tables in which he concludes among various other things that the Senate is more likely to attend yea and nay calls than quorum calls, that private bills are the most difficult to enact into laws, that public bills come next, and that about half the legislation initiated into the Senate receives little or no attention; that in frequency of remarks progressive republicans have the highest average and that this is directly proportioned to their education; that 79% of the Senate are professional men and only 21% business men; that a large majority, 67% were reared in the country, and that there are most University graduates and most College graduates among the Republicans.

The *Journal of Personal Research*, beginning in February, prints a series of articles by E. Mayo, on the irrational factor in society, which is both valuable and interesting reading for teachers, showing that in many cases those who have greatly succeeded in life have had their careers and choices pre-formed for them in reveries that often go back to childhood, and that this same autonomic kind of mentation is also the breeding ground of various psychoses and neuroses; the foundations for those that had their first outbreak in mature and even late life having had their inception in pre-adolescent habits and experiences.

Victor Branford in "*The Vital Revolution*," a sociological review (1923), "sees a coming tide of humanized science." "Man is rich in nature's finer latencies with their flowers of grace and fruits of freedom." His notes may be called science and sanity, or knowledge and worship, or power and grace, or certitude and faith, or synthesis and vision, or facts and values. The day-dreaming of youth may later flame into vision, and saintly and chivalrous lives, or it may lapse into vice, or merge into mediocrity. The day-dream may thus become a ladder to perfection. "The essence of worship is in the revealing power of sacrifice, and the dedication of life to worthy objects." The marriage of sanctity and science is thus deep in the purposes of nature. Science may lead to intellectual pride. "The science of knowledge ancillary to the higher types of religion issues in growing volume from anthropology, psychology and sociology." There is a shift in the centre of gravity. We know nature only as the environment of life which must be given the central place. Thus we need a vital revolution. A departure from the vitalized tradition has been taken by philosophy. We want a vitalized philosophy of science returning to the central tradition of systematic thought. We must divide the sciences into three groups: (1) those dealing with human life and society; (2) with the phenomena of the material world. The first is the higher the latter the lower, but intermediate between the humanist and physical group, linked between them, comes the science of plant and animal life. The trouble is that in business, politics, education, and even the family, we have become dominated by the lower sciences.

Annual Report of the Board of Regents of the Smithsonian Institution. Washington, Government Printing Office, 1922. 638 p.

Annual Report of the Commissioner of Mental Diseases. Mass., 1921. Boston, Wright & Potter Printing Co. 278 p.

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